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VERSION	AY534758.1 GI:45384965
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ORGANISM	SARS coronavirus Sin0409
SEGMENT	SARS coronavirus Sin0409
REFERENCE	Viruses; ssRNA positive-strand viruses, no DNA stage; Nidovirales; Coronaviridae; Coronavirus.
AUTHORS	Lim, P.L., Kurup, A., Gopalakrishna, G., Chan, K.P., Wong, C.W., Ng, L.C., Se-THoe, S.Y., Oon, L., Bi, X., Stanton, L.W., Ruan, Y., Miller, L.D., Vega, V.B., James, L., Ooi, P.L., Kai, C.S., Olsen, S.J., Ang, B., and Leo, Y.S.
TITLE	Laboratory-acquired severe acute respiratory syndrome (SARS) - Singapore 2003
JOURNAL	Unpublished
REFERENCE	2 (bases 1 to 14011)
AUTHORS	Ruan, Y., Lee, C., Lin, S., Thoreau, H., Vega, V.B., Stanton, L.W. and Ruan, Y.
TITLE	Direct Submission
JOURNAL	Submitted (28-JAN-2004) Genome Institute of Singapore, 60, Biopolis Street, 02-001, Genome, Singapore 138672, Singapore
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JOURNAL	Submitted (11-NOV-2003) Key Lab of Medical Molecular Virology, Shanghai Medical College, Fudan University, 138 Yi Xue Yuan Road, Shanghai 200032, P.R. China
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RANNYCSKSLPLNTVPECKSKCDESASSKSASVSYSSOLMCQ1ILLDQDLYISDVOSTEVSVRMPIAVDTSATSVPMERKALAVATAHSBELKGVALGVUSTFVSAARHINAQVAKSHNIVSLINXKOMMSLSEOLRKGIRSAAKKONIPEFLTCATRQYQVNIPTKISLKGGKJIVSTCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLNNEHYRALSFGCVDAMNLIANIIFTPLVOPVGALDASASVYAGGIAIAIVTCAAYEMKERRAFGEYHNVVAANALFIMSMEPLCILVLPAYSFPLGYVSFVFLYLTTFINDUSFLFHLLNCFKMLKATLQVLAALQVYK1IMPVHFLSYLALYNYKCYFSDPQVTRDL1ISTDCFANKHAGDWFQSRSQGSSYKNDKSCPVAA1LTREIGFIVPGLPCTV1RAINGDPEHLPRVESAVGNICYTPSKLIEYSDATSAVLAACETCFDAMGKPPYCYDUNLLEGIS1SELRDFTYVLM1QFPLVOPVGALDASCTCERSVGICLSTSGRWLN



JOURNAL	Unpublished	REFERENCE 1	(bases 1 to 29433)
AUTHORS	The SARS epidemiology consortium of Guangdong	AUTHORS	The SARS epidemiology consortium of Guangdong
CONSRNM	From independent foci of epidemic outbreak to large genomic	CONSRNM	From independent foci of epidemic outbreak to large genomic
TITLE	alteration in late phase viruses: evolution of the SARS-coronavirus	TITLE	alteration in late phase viruses: evolution of the SARS-coronavirus
JOURNAL	Unpublished	JOURNAL	Unpublished
FEATURES	2 (bases 1 to 29433)	FEATURES	2 (bases 1 to 29433)
SOURCE		SOURCE	
ORIGIN		ORIGIN	
Query Match	90.9%; Score 20; DB 14; Length 29350;	Query Match	90.9%; Score 20; DB 14; Length 29433;
Best Local Similarity	75.0%; Pred. No. 6.5;	Best Local Similarity	75.0%; Pred. No. 6.5;
Matches	15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;	Matches	15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
Qy	1 GUGAACUCACUGGAGGCU 20  :    :    :    :    : Db 761 GTGAACTCACTCGTGAGCTC 780	Qy	1 GUGAACUCACUGGAGGCU 20  :    :    :    :    : Db 725 GTGAACTCACTCGTGAGCTC 744
RESULT 8		RESULT 10	
AY95002	AY395002 SARS coronavirus LC5, complete genome.	AY394985 SARS coronavirus HSZ-Bb, complete genome.	
DEFINITION	SARS coronavirus LC5, complete genome.	LOCUS	AY394985
ACCESSION	AY395002	DEFINITION	SARS coronavirus HSZ-Bb, complete genome.
VERSION	AY395002.1	VERSION	AY394985
KEYWORDS		KEYWORDS	
ORGANISM	SARS coronavirus LC5	ORGANISM	SARS coronavirus HSZ-Bb
	Viruses; ssRNA Positive-strand viruses, no DNA stage; Nidovirales; Coronaviridae; Coronavirus.		Viruses; ssRNA Positive-strand viruses, no DNA stage; Nidovirales; Coronaviridae; Coronavirus.
REFERENCE 1	(bases 1 to 29350)	REFERENCE 1	(bases 1 to 29530)
AUTHORS	The SARS epidemiology consortium of Guangdong	AUTHORS	The SARS epidemiology consortium of Guangdong
CONSRNM	Viruses; ssRNA Positive-strand viruses, no DNA stage; Nidovirales; Coronaviridae; Coronavirus.	CONSRNM	Viruses; ssRNA Positive-strand viruses, no DNA stage; Nidovirales; Coronaviridae; Coronavirus.
TITLE	From independent foci of epidemic outbreak to large genomic alteration in late phase viruses: evolution of the SARS-coronavirus	TITLE	From independent foci of epidemic outbreak to large genomic alteration in late phase viruses: evolution of the SARS-coronavirus
JOURNAL	Unpublished	JOURNAL	Unpublished
FEATURES	2 (bases 1 to 29350)	FEATURES	2 (bases 1 to 29530)
SOURCE		SOURCE	
ORIGIN		ORIGIN	
Query Match	90.9%; Score 20; DB 14; Length 29350;	Query Match	90.9%; Score 20; DB 14; Length 29530;
Best Local Similarity	75.0%; Pred. No. 6.5;	Best Local Similarity	75.0%; Pred. No. 6.5;
Matches	15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;	Matches	15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
Qy	1 GUGAACUCACUGGAGGCU 20  :    :    :    :    : Db 761 GTGAACTCACTCGTGAGCTC 780	Qy	1 GUGAACUCACUGGAGGCU 20  :    :    :    :    : Db 526 GTGAACTCACTCGTGAGCTC 545
RESULT 9		RESULT 11	
AY94977	AY394977 SARS coronavirus GZ-A, partial genome.	AY338174 SARS coronavirus Taiwan TC1, complete genome.	
DEFINITION	SARS coronavirus GZ-A, partial genome.	LOCUS	AY338174
ACCESSION	AY394977	DEFINITION	SARS coronavirus Taiwan TC1, complete genome.
VERSION	AY394977.1	VERSION	AY338174
KEYWORDS		VERSION	AY338174.1
SOURCE			
ORIGIN			
Query Match	90.9%; Score 20; DB 14; Length 29350;	Query Match	90.9%; Score 20; DB 14; Length 29573;
Best Local Similarity	75.0%; Pred. No. 6.5;	Best Local Similarity	75.0%; Pred. No. 6.5;
Matches	15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;	Matches	15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;
Qy	1 GUGAACUCACUGGAGGCU 20  :    :    :    :    : Db 761 GTGAACTCACTCGTGAGCTC 780	Qy	1 GUGAACUCACUGGAGGCU 20  :    :    :    :    : Db 526 GTGAACTCACTCGTGAGCTC 545

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TITLE SARS coronavirus TC2, clinical specimen  
JOURNAL Unpublished  
REFERENCE 2 (bases 1 to 29573)  
AUTHORS Chang,J., Lin,T., Chen,C., Lin,T., Chan,W. and Shih,M.  
TITLE Direct Submission  
JOURNAL Submitted (09-JUN-2003) Department of Molecular Medicine, China  
Medical University Hospital, 2, Yun Der Road, Taichung, Taiwan  
REFERENCE 3 (bases 1 to 29573)  
AUTHORS Chang,J., Lin,T., Chen,C., Lin,T., Chan,W. and Shih,M.  
TITLE Direct Submission  
JOURNAL Submitted (28-JUL-2003) Department of Molecular Medicine, China  
Medical University Hospital, 2, Yun Der Road, Taichung, Taiwan  
Amino acid sequence updated by submitter  
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Db 707 GTGAACTCACTCGTAGCTC 726

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LOCUS AY338175  
DEFINITION SARS coronavirus Taiwan TC2, complete genome.  
ACCESSION AY338175  
VERSION AY338175..1 GI:32493130  
KEYWORDS SARS coronavirus Taiwan TC2  
ORGANISM SARS coronavirus Taiwan TC2  
SOURCE Viruses; serNA positive-strand viruses, no DNA stage: Nidovirales;  
Coronaviridae; Coronavirus.  
REFERENCE 1 (bases 1 to 29573)  
AUTHORS Chang,J., Lin,T., Chen,C., Lin,T., Chan,W. and Shih,M.

RESULT 12  
LOCUS AY338175  
DEFINITION SARS coronavirus Taiwan TC2, complete genome.  
ACCESSION AY338175  
VERSION AY338175..1 GI:32493130  
KEYWORDS SARS coronavirus Taiwan TC2  
ORGANISM SARS coronavirus Taiwan TC2  
SOURCE Viruses; serNA positive-strand viruses, no DNA stage: Nidovirales;  
Coronaviridae; Coronavirus.  
REFERENCE 1 (bases 1 to 29573)  
AUTHORS Chang,J., Lin,T., Chen,C., Lin,T., Chan,W. and Shih,M.





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Best Local Similarity	90.9%	20	14	29573	
Matches 15;	Conservative	Pred. No.	6.5		
		Mismatches	5		
		Indels	0	Gaps	0
RESULT 14					
DEFINITION	AY559094	29577 bp	RNA	linear	VRL 24-SEP-2004
ORGANISM	SARS coronavirus	Sin846			
VERSION	AY559094	complete	Genome.		
AUTHORS	GI:45645021				
KEYWORDS					
SOURCE	SARS coronavirus	Sin846			
ORGANISM	SARS coronavirus	Sin846			
Viruses; ssRNA positive-strand viruses, no DNA stage; Nidovirales; Coronaviridae; Coronavirus.					
REFERENCE	1	(bases 1 to 29577)			
AUTHORS	Vega,V.B., Ruan,Y., Liu,J., Lee,W.H., Wei,C.L., Se-Thoe,S.Y., Tang,K.F., Zhang,T., Kolatkor,P.R., Ooi,E.E., Ling,A.E., Stanton,J.W., Long,P.M. and Liu,E.T.				
TITLE	Mutational dynamics of the SARS coronavirus in cell culture and human populations isolated in 2003 (er)				
JOURNAL	BMC Infect. Dis.	4 (1)	32	(2004)	
PUBLISHED	1534/429				
REFERENCE	2	(bases 1 to 29577)			
AUTHORS	Vega,V.B., Ruan,Y., Liu,J., Lee,W.H., Wei,C.L., Se Thoe,S.Y., Tang,K.F., Zhang,T., Lin,S., Kolatkor,P., Ooi,E.B., Be,L.A., Stanton,J.W., Long,P.M. and Liu,E.T.				
TITLE	Submitted #24-FBB-2004				
JOURNAL	Genome Institute of Singapore	60	Biopolis Street	#02-01, Genome	Singapore 1386782, Singapore
SIGNATURES	[Locality/Qualifiers]				

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LOCUS	AY463059 29592 bp RNA linear VRL 05-JAN-2004
DEFINITION	SARS coronavirus ShanghaiQXCI complete genome.
ACCESSION	AY463059 AH013000 AY322197 AY322198 AY322199
VERSION	AY463059.1 GI:40457433
KEYWORDS	
SOURCE	SARS coronavirus ShanghaiQXCI
ORGANISM	SARS coronavirus ShanghaiQXCI
Viruses; ssRNA positive-strand viruses, no DNA stage; Nidovirales; Coronaviridae; Coronaviruses.	
REFERENCE	1 (bases 1 to 2952)
AUTHORS	Yuan,Z., Zhang,X., Hu,Y., Lan,S., Zhou,Z., Wang,H. and Wen,Y.
JOURNAL	Analysis of SARS coronavirus genome in Shanghai isolates
REFERENCE	2 (bases 1 to 29592)
AUTHORS	Yuan,Z., Zhang,X., Hu,Y., Lan,S., Zhou,Z., Wang,H. and Wen,Y.
JOURNAL	Direct Submission (11-NOV-2003) Key Lab of Medicinal Molecular Virology, Shanghai Medical College, Fudan University, 138 Yi Xue Yuan Road, Shanghai 200032, P.R. China
TITLE	Submitted On or before Jan 5, 2004 this sequence version replaced
COMMENT	gi:32454355, gi:32454356, gi:32454357, gi:32454358.
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AUTHORS	/mol_type="genomic RNA"
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AUTHORS	/join(186 .13313,13313. .21406)
JOURNAL	/note="ribosomal slippage"
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Query Match 90.9%; Score 20; DB 14; Length 29592;  
Best Local Similarity 75.0%; Pred. No. 6.5;  
Matches 15; Conservative 5; Mismatches 0; Indels 0;  
Gaps 0;

Qy 1 GUGAACUCACTCGUGAGCU 20  
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Db 697 GTGAACTCACTCGTGAGTC 716

Search completed: June 24, 2005, 01:35:35  
Job time : 765.417 secs

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OM nucleic - nucleic search, using sw model

Run on: June 23, 2005, 23:06:41 ; Search time 192.283 Seconds  
(without alignments)

677.304 Million cell updates/sec

Title: US-10-848-737-1

Perfect score: 22

Sequence: 1 gnuacucacugugagcctt 22

Scoring table: IDENTITY NUC GapOp 10.0 , Gapext 1.0

Searched: 4390206 seqs, 2959870667 residues

Total number of hits satisfying chosen parameters: 8780412

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

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3: geneseqn2000s:\*

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5: geneseqn2001bs:\*

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8: geneseqn2003as:\*

9: geneseqn2003bs:\*

10: geneseqn2003cs:\*

11: geneseqn2003ds:\*

12: geneseqn2004as:\*

13: geneseqn2004bs:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query	Match	Length	DB	ID	Description
1	20	90.9	29751	12	ADJ39000		Adj39000 SARS coro
2	18.8	85.5	340449	8	AAL52198		Aal52198 Human sec
3	17.2	78.2	4113	10	ABT41930		Abt41930 Toxicity
4	17.2	78.2	4113	12	ADP72828		Adp72828 Renal tox
5	17.2	78.2	4131	2	AAV26965		Aav26965 Rat kidney
6	17.2	78.2	4131	2	AAV95860		Aav95860 Rat kidney
7	17.2	78.2	4131	2	ARZ5056		Aaz25056 Rat parat
8	17.2	78.2	4131	2	AAV82486		Aav82486 Rat parat
9	17.2	78.2	4131	3	AAZ89299		Aaz39299 Rat calciferous gland
10	17.2	78.2	4131	6	AAV72123		Aav72123 CDNA enco
11	17.2	78.2	4550	12	AD03015		Ado03015 Mouse GPC
12	17.2	78.2	57561	11	ACN44600		Acn44600 Mouse gen
C 13	17.2	78.2	110000	13	ABD32923_5		Abd32923 Continuation (6 of 5'
14	16.8	76.4	44	2	AAQ21468		Aaq21468 2C29:8_P
15	16.8	76.4	44	2	AAQ59009		Aaq59009 Primer to
16	16.8	76.4	44	2	AAV70902		Aav70902 Primer to
17	16.8	76.4	305	6	ABX88798		Abx88798 Human col
C 18	16.8	76.4	398	8	ABX55821		Abx55821 Bovine ES
19	16.8	76.4	534	6	ABN69216		Abn69216 Streptococcus
20	16.8	76.4	537	8	ACAS50276		Acas50276 Prokaryot

## ALIGNMENTS

C 21	16.8	76.4	539	4	AAK91848	Human cDNA
C 22	16.8	76.4	539	4	AAK93253	AAK93253 Human cDNA
C 23	16.8	76.4	539	12	ADL28275	Adl28275 5' end of
C 24	16.8	76.4	539	12	ADL29680	Adl29680 5' end of
C 25	16.8	76.4	945	13	ADT44529	Bacterial DNA-encod
C 26	16.8	76.4	1065	5	AAS70168	Aas70168 DNA-encod
C 27	16.8	76.4	1556	4	AAI63946	Aai63946 Human pol
C 28	16.8	76.4	1556	4	AAS31613	Aas31613 CDNA enco
C 29	16.8	76.4	1556	4	ABK43547	Abk43547 DNA enco
C 30	16.8	76.4	1556	12	ADT54334	Adt54334 CDNA enco
C 31	16.8	76.4	1556	12	ADM24497	Adm24497 Human PRO
C 32	16.8	76.4	2518	4	AAK94748	Aak94748 Human ful
C 33	16.8	76.4	2518	12	ADJ31785	Adj31785 Full leng
C 34	16.8	76.4	2991	4	ABK43659	Abk43659 DNA enco
C 35	16.8	76.4	2991	12	ADT54046	Adt54046 CDNA enco
C 36	16.8	76.4	3849	4	AAI63871	Aai63871 Human pol
C 37	16.8	76.4	3849	12	ADM24422	Adm24422 Human con
C 38	16.8	76.4	5195	10	ADFS5868	Adfs5868 Rat gene
C 39	16.8	76.4	12505	10	ADE62909	Ade62909
C 40	16.8	76.4	95484	12	ADQ97298	Adq97298 Mouse can
C 41	16.4	74.5	350	8	ABZ56738	Abz56738 Aspergill
C 42	16.4	74.5	619	10	ADKS8384	Adks8384 Plant DNA
C 43	16.4	74.5	619	10	ADM57664	Adm57664 Plant DNA
C 44	16.4	74.5	619	11	ADM5449	Adm5449 Insect re
C 45	16.4	74.5	633	3	AAFL13945	Aaf13945 Aspergill

## SUMMARY

## RESULT

1  
ADJ39000 standard; DNA; 29751 BP.

ID ADJ39000;

XX AC ADJ39000;

XX DT 06-MAY-2004 (first entry)

XX DE SARS coronavirus nucleotide sequence.

XX KW small interfering RNA; siRNA; modified ribonucleotide; viral replication inhibition; hepatitis C virus; HCV; hepatitis C;

KW antinflammatory; hepatotropic; virucide; hepatitis A virus;

KW hepatitis D virus; hepatitis E virus; Ebola virus; influenza virus;

KW rotavirus; revovirus; retrovirus; poliovirus; human papilloma virus;

KW metapneumoniavirus; coronavirus; viral infection; gene; ds.

XX OS SARS coronavirus.

XX PN WO2004011647-A1.

XX PD 05-FEB-2004.

XX PP 25-JUL-2003; 2003NO-US023104.

XX PR 26-JUL-2002; 2002US-0398605P.

XX PA (CHIRON CORP.)

XX PI Han J, Seo MY, Houghton M;

XX DR WPI; 2004-143862/14.

XX PT New RNase resistant small interfering RNA, useful for treating viral infections, e.g., hepatitis C, influenza virus or coronavirus infection.

XX PS Example 10; Fig 3; 74pp; English.

CC The present invention describes a small interfering RNA (siRNA) which

CC comprises a modified ribonucleotide, where the siRNA is resistant to

CC RNase and retains the ability to inhibit viral replication. Also

CC described: (1) inactivating a virus in a patient; (2) making a modified

CC siRNA that targets a nucleic acid sequence in a virus; (3) a double-

CC

stranded RNA molecule of 10-30 nucleotides that inhibits replication of hepatitis C virus (HCV); (4) inducing targeted RNA interference toward HCV in hepatic cells; (5) inhibiting replication of HCV; (6) a vector comprising a DNA segment encoding the RNA molecule; (7) a host cell comprising the vector of (6); (8) inhibiting replication of HCV in cells carrying HCV; (9) treating hepatitis C in a subject; (10) a modified siRNA molecule comprising a double-stranded RNA molecule of 10-30 nucleotides in length, which mediates RNA interference toward a target agent or virus and is linked to at least one receptor-binding ligand; and (11) inducing targeted RNA interference in a patient. The modified siRNA molecules have antiinflammatory, hepatotropic and virucide activities. The modified RNA molecules are useful for inactivating virus in mammalian cells. The siRNAs are useful for treating hepatitis C virus, hepatitis A virus, hepatitis D virus, hepatitis E virus, Ebola virus, influenza virus, rotavirus, reovirus, retrovirus, human papilloma virus, metapneumonavirus or coronavirus infections. The methods of the invention can be used to correct or compensate for cellular physiological abnormalities involved in conferring susceptibility to viral infections in patients and/or alleviate symptoms of a viral infection in patients. The present sequence represents the SARS coronavirus nucleotide sequence, which is used in an example from the present invention.

Sequence 29751 BP: 8478 A; 5941 C; 6168 G; 9144 T; 0 U; 0 Other;  
 Query Match Score 20: DB 12; Length 23751;  
 Best Local Similarity 90.9%; Pred. No. 8;  
 Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
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 Db 776 GTGAACTACTCGTAGTC 795

RESULT 2  
 AAL52198 standard; cDNA; 340449 BP.  
 XX DT AAL52198 standard; cDNA; 340449 BP.

AC AAL52198;

XX 22-SEP-2003 (first entry)

DE Human secreted protein genomic DNA coding sequence.

XX Human; gene; ds; secreted protein; chromosome 5; tissue typing; secreted protein-related disease; transgenic animal; drug screening; pharmacogenomic analysis; single nucleotide polymorphism; SNP.

OS Homo sapiens.

XX Key variation

FT variation replace(1107, T)

FT variation /\*tag= a

FT variation /\*standard\_name= "Single nucleotide polymorphism"

FT variation replace(5479, G)

FT variation /\*tag= b

FT variation /\*standard\_name= "Single nucleotide polymorphism".

FT variation replace(5480, G)

FT variation /\*tag= c

FT variation /\*standard\_name= "Single nucleotide polymorphism"

FT variation replace(6100, T)

FT variation /\*tag= d

FT variation /\*standard\_name= "Single nucleotide polymorphism".

FT variation replace(6122, A)

FT variation /\*tag= e

FT variation /\*standard\_name= "Single nucleotide polymorphism"

FT variation replace(6883, G)

FT variation /\*tag= f

FT variation /\*standard\_name= "Single nucleotide polymorphism"

FT variation replace(7641, G)

FT variation /\*tag= g

FT variation /\*standard\_name= "Single nucleotide polymorphism"

FT variation replace(8493, T)

FT variation /\*tag= h

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replace(9758, A)
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FT variation /standard_name= "Single nucleotide polymorphism"
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FT variation /standard_name= "Single nucleotide polymorphism"
replace(10311, G)
/*tag= m
FT variation /standard_name= "Single nucleotide polymorphism"
replace(10831, T)
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FT variation /standard_name= "Single nucleotide polymorphism"
replace(12230, C)
/*tag= o
FT variation /standard_name= "Single nucleotide polymorphism"
replace(12378, C)
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FT variation /standard_name= "Single nucleotide polymorphism"
replace(13423, T)
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replace(14116, G)
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replace(14508, C)
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replace(18592, T)
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replace(18516, G)
/*tag= af
FT variation /standard_name= "Single nucleotide polymorphism"

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FT variation replace(20491, T)
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FT variation replace(2023, G)
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FT variation replace(23118, C)
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FT PT /*tag= bj /standard name= "Single nucleotide polymorphism"
FT variation replace(40395, C)

FT Query Match 85.5%; Score 18.8; DB 8; Length 340449;
FT Best Local Similarity 68.2%; Pred. No. 48;
FT Matches 15; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

QY 1 GUGACUCACUCGAGAGCTT 22
Db 257426 GTGAACTCTCTAGCTT 267447

RESULT 3
ABT41930
ID ABT41930 standard; DNA; 4113 BP.
XX
AC ABT41930;
XX
DT 26-JUN-2003 (first entry)
XX
DE Toxicity modeling related rat gene SEQ ID No 1632.
XX
KW Toxic effect; gene expression profile; renal toxicity; toxicity marker;
KW database; drug screening; toxicity assay; rat; ds.
XX
OS Rattus norvegicus.
XX
PN WO200295000-A2.
XX
PD 28-NOV-2002.
XX
PF 22-MAY-2002; 2002K0-US016173.
XX
PR 22-MAY-2001; 2001US-0294335P.
PR 13-JUN-2001; 2001US-029523P.
PR 19-JUN-2001; 2001US-029925P.
PR 10-JUL-2001; 2001US-030807P.
PR 10-JUL-2001; 2001US-030808P.
PR 10-JUL-2001; 2001US-030810P.
PR 28-AUG-2001; 2001US-0315047P.
PR 27-SEP-2001; 2001US-0324928P.
PR 22-OCT-2001; 2001US-0330462P.
PR 01-NOV-2001; 2001US-033867P.
PR 21-NOV-2001; 2001US-0331805P.
PR 06-DEC-2001; 2001US-033144P.
PR 19-DEC-2001; 2001US-0340873P.
PR 21-FEB-2002; 2002US-0357842P.
PR 21-FEB-2002; 2002US-0357843P.
PR 21-FEB-2002; 2002US-0357844P.
PR 15-MAR-2002; 2002US-0361134P.
PR 08-APR-2002; 2002US-037144P.
PR 08-APR-2002; 2002US-0371206P.
PR 08-APR-2002; 2002US-0372247P.
PR 17-APR-2002; 2002US-0372794P.
PR 21-APR-2002; 2002US-0371679P.

PA (GENE-) GENE LOGIC INC.
XX
PA Mendrick D, Porter M, Johnson K, Higgs B, Castle A, Blashoff M;
```

XX WPI: 2003-148464/14.  
XX Predicting at least one toxic effect of a compound, useful for toxicity  
XX modeling, comprises preparing a gene expression profile of a tissue or  
XX cell sample exposed to the compound, and comparing the gene expression  
XX profile to a database.  
XX Example 4; Page: 446pp; English.  
XX The invention relates to a novel method of predicting at least one toxic  
XX effect of a compound. The method comprises a gene expression profile of  
XX tissue or cell sample exposed to the compound, and comparing the gene  
XX expression profile to a database comprising at least part of the data or  
XX information given in the specification. The methods are useful for  
XX predicting at least one toxic effect of a compound, predicting the renal  
XX progression of a toxic effect of a compound, predicting the renal  
XX toxicity of a compound, or identifying toxicity markers in tissues or  
XX cells exposed to known renal toxin. The genes are useful as toxicity  
XX markers in drug screening and toxicity assays, in monitoring disease or  
XX physiological states, or disease progression. This polynucleotide  
XX represents a rat DNA sequence relating to the toxic effect database  
XX described in the specification. NOTE: The sequence data for this patent  
XX did not form part of the printed specification, but was obtained in  
XX electronic format directly from the World Intellectual Property  
Organization  
XX Sequence 4113 RP: 970 A: 1120 C: 1052 G: 921 T: 0 V: 0 Other:  
XX

Query	Match	Score	Length	DB 10;	DB 11;	Gaps
Query	1	GUGAACTACUCUGAGCCU	22			
Db	3950	GTAACATGACTGGGGCTCT	3971			
Best Local Similarity	78.2%	Score	17.2.	Pred.	No. 1.	
Matches	63 6%	Length	4113;	6e+02;	1.e+02;	
Matches	14;	DB 10;		Mismatches	3;	Indels
Matches	14;	DB 11;		5;	0;	Gaps
Conservative						

RESULT 4	Db	3950	GTCAGCTGACTGTGTGTCTT	3971
ADP72828	ID	ADP72828	standard; DNA;	4113 BP.
XX	XX	XX	AAV26965 standard;	cDNA to mRNA; 4131 BP.
AC	AC	XX	AAV26965	.
XX	XX	XX	AAV26965;	
DT	DT	XX	AC	
DE	DE	XX	XX	
XX	XX	XX	01-SEP-1998	(first entry)
KW	ds; toxic effect; gene expression profile; kidney tissue;	XX	XX	Rat kidney calcium receptor 3A gene 4Kb fragment.
KW	differential gene expression; toxicity progression; toxicity marker;	XX	XX	
KW	drug screening; toxicity assay; kidney pathology; nephritis;	XX	XX	homeostasis; kidney; parathyroid hormone;
KW	kidney necrosis; glomerular injury; tubular injury;	XX	XX	calcium concentration; calcium receptor; detection.
KW	focal segmental glomerulosclerosis.	XX	XX	
XX	Rattus sp.	OS	OS	
XX	Rattus norvegicus.	XX	XX	
XX	XX	XX	FH	Location/Qualifiers
PN	WO2004048598-A2.	PN	CDS	574 . 3813
XX	XX	XX	FT	/*tag= ^
PD	10-JUN-2004.	PD	FT	/product= "pRakCar 3A 4Kb fragment"
XX	XX	XX	XX	
PF	24-NOV-2003; 2003WO-US037556.	PN	US5763569-A.	
XX	XX	XX	XX	
PR	22-NOV-2002; 2002US-00301856.	PD	09-JUN-1998	
XX	XX	XX	XX	
PA	(GENE-) GENE LOGIC INC.	PF	07-JUN-1995;	95US-00484565.
XX	Mendrick DL, Porter MW, Johnson KR, Castle A, Higgs B;	XX	XX	
PI	Elashoff M,	PR	23-AUG-1991;	91US-00749451.
PI	Elashoff M,	PR	11-FEB-1992;	92US-0083444.
XX	XX	PR	21-AUG-1992;	92US-00934461.
DR	WPI; 2004-460771/43.	PR	12-FEB-1993;	93US-00017127.
XX	XX	PR	23-FEB-1993;	93US-00009389.
PT	Predicting (the progression of) a toxic effect of a compound, for monitoring the progression of renal disease states, comprises preparing a	PR	22-OCT-1993;	93US-00141248.
PT	PR	19-AUG-1994;	94US-00292827.	

PR 21-OCT-1994; 94WO-US012117.  
 PR 08-DEC-1994; 94US-00353784.  
 XX  
 PA (NPS- ) NPS PHARM INC.  
 PA (BGM ) BRIGHAM & WOMENS HOSPITAL.  
 XX  
 PI Hebert SC, Brown EM, Garrett JE;  
 XX  
 DR WPI; 1998-347412/30.  
 DR P-PSDB; AAW54847.  
 XX  
 PT Calcium receptor poly:peptide(s) - useful for drug screening or antibody production.  
 XX  
 PS Example 30; Fig 50; 174pp; English.  
 XX  
 CC The rat kidney calcium receptor gene encodes a 1079 amino acid protein.  
 CC The tissue from which this receptor and receptors from bovine parathyroid  
 CC and rat kidney are derived, respond to changes, and control changes, in  
 CC calcium ion concentration, e.g. parathyroid hormone regulates Ca<sup>2+</sup>  
 CC homeostasis in blood and extracellular fluid, and kidney function alters  
 CC through changes in Ca<sup>2+</sup> levels in juxtaglomerular and proximal tubule  
 CC cells in the kidney. The purified receptors (produced recombinantly) can  
 CC be used to screen for compounds that modulate calcium receptor activity,  
 CC especially those that can be used to treat diseases associated with the  
 CC receptors in these tissues. They can also be used to raise antibodies for  
 CC use in detection assays  
 XX  
 SQ Sequence 4131 BP; 988 A; 1170 C; 1052 G; 921 T; 0 U; 0 Other;  
 Query Match Score 78.2%; Pred. No. 1.6e+02; Length 4131;  
 Best Local Similarity 63.6%; Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0; Gaps 0;  
 DB 3950 GTGAACTGACTGGTGCTCTT 3971

RESULT 6  
 AAT95860  
 ID AAT95860 standard; cDNA to mRNA; 4131 BP.  
 AC AAT95860;  
 XX  
 DT 08-MAY-1998 (first entry)  
 DE Rat kidney cell calcium receptor 3A (RakCar 3A) cDNA.  
 XX  
 KW Rat kidney cell calcium receptor 3A; RakCar 3A; calcium homeostasis;  
 KW hyperparathyroidism; osteoporosis; ss.  
 XX  
 OS Rattus sp.  
 XX  
 FH Key  
 FT 574. .3813  
 FT Location/Qualifiers  
 FT /\*tag= a /product= "kidney\_cell\_calcium\_receptor\_3A"  
 FT  
 XX  
 PN US5689938-A.  
 XX  
 PD 18-NOV-1997.  
 XX  
 PP 07-JUN-1995; 95US-00485588.  
 XX  
 PR 23-AUG-1991; 91US-00749451.  
 PR 11-FEB-1992; 92US-0083044.  
 PR 21-AUG-1992; 92US-00934161.  
 PR 12-FEB-1993; 93US-00017127.  
 PR 23-FEB-1993; 93US-00009389.  
 PR 22-OCT-1993; 93US-00141248.  
 PR 19-AUG-1994; 94US-00292827.  
 PR 21-OCT-1994; 94NO-US012117.  
 PR 08-DEC-1994; 94US-00353784.  
 PR 07-JUN-1995; 95US-00484565.  
 XX  
 PA (NPSP- ) NPS PHARM INC.  
 PA (BGM ) BRIGHAM & WOMENS HOSPITAL.  
 XX  
 PI Brown EM, Hebert SC, Garrett JE;

PR 08-DEC-1994; 94US-00353784.  
 XX  
 PA (BGM ) BRIGHAM & WOMENS HOSPITAL.  
 PA (NPSP- ) NPS PHARM INC.  
 XX  
 PI Garrett JE, Fuller FH, Brown EM, Hebert SC;  
 XX  
 DR WPI; 1998-008040/01.  
 DR P-PSDB; AAW38375.  
 XX  
 PT DNA encoding calcium receptor polypeptide(s) - useful for therapeutic purposes, e.g. hyperparathyroidism and osteoporosis.  
 XX  
 PS Claim 15; Col 133-142; 174pp; English.  
 XX  
 CC The present sequence encodes rat kidney cell calcium receptor 3A (RakCar 3A). The specification includes details of molecules that can modulate one or more inorganic ion receptor activities, and antibodies and antibody fragments targeted to inorganic ion receptor proteins. The proteins, nucleic acids and antibodies may be used to treat disorders by modulating one or more inorganic ion receptor activities, preferably disorders of calcium homeostasis, e.g. hyperparathyroidism and osteoporosis  
 XX  
 SQ Sequence 4131 BP; 987 A; 1170 C; 1053 G; 921 T; 0 U; 0 Other;  
 Query Match Score 78.2%; Pred. No. 1.6e+02; Length 4131;  
 Best Local Similarity 63.6%; Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0; Gaps 0;  
 DB 3950 GTGAACTGACTGGTGCTCTT 3971

RESULT 7  
 AAZ25056  
 ID AAZ25056 standard; cDNA to mRNA; 4131 BP.  
 XX  
 AC AAZ25056;  
 XX  
 DT 08-DEC-1999 (first entry)  
 DE Rat parathyroid calcium receptor 3A nucleotide sequence.  
 XX  
 KW Parathyroid; calcium receptor; inorganic ion receptor; modulator;  
 KW receptor expression; detection; ss.  
 XX  
 OS Rattus sp.  
 XX  
 FH Key  
 FT 574. .3813  
 FT Location/Qualifiers  
 FT /\*tag= a /product= "RakCar 3A"  
 FT /note= "parathyroid calcium receptor"

XX  
 PN USS62314-A.  
 XX  
 PD 05-OCT-1999.  
 XX  
 PF 03-OCT-1997;  
 XX  
 PR 23-DEC-1993; 93US-00009389.  
 PR 22-OCT-1993; 93US-00141248.  
 PR 19-AUG-1994; 94US-00292827.  
 PR 21-OCT-1994; 94NO-US012117.  
 PR 08-DEC-1994; 94US-00353784.  
 PR 07-JUN-1995; 95US-00484565.  
 XX  
 PA (NPSP- ) NPS PHARM INC.  
 PA (BGM ) BRIGHAM & WOMENS HOSPITAL.  
 XX  
 PI Brown EM, Hebert SC, Garrett JE;



US6031003-A.	PN XX	AC XX	AAI72123;
29-FEB-2000.	PD XX	XX	25-MAR-2002 (First entry)
07-JUN-1995;	PF XX	95US-00484719.	
	PR XX		CDNA encoding pRakCar3A.
23-AUG-1991;	91US-00749451.	KW XX	Calcium receptor; bovine; human; parathyroid; calcium receptor; thyroid; C-cell; inorganic ion receptor; homeostasis; sarcoidosis; hyperparathyroidism; osteoporosis; central nervous system; seizure; stroke; head trauma; spinal cord injury; organ transplant rejection; hypoxia-induced nerve cell damage; cardiac arrest; neonatal distress; epilepsy; neurodegenerative disease; Alzheimer's disease; cirrhosis; Huntington's disease; Parkinson's disease; dementia; depression; anxiety; panic disorder; obsessive-compulsive disorder; spastic colon; post-traumatic stress disorder; schizophrenia; diarrhoea; kidney; neuroleptic malignant syndrome; Tourette's syndrome; gut motility; inappropriate ADH secretion; SIADH; gastrointestinal ulcer disease; congestive heart failure; nephrosis; hypertension; alternative splicing; aminoglycoside antibiotic; ss.
11-FEB-1992;	92US-00834044.	KW XX	
21-AUG-1992;	92US-00934161.	KW XX	
12-FEB-1993;	93US-0001717.	KW XX	
23-FEB-1993;	93US-0000389.	KW XX	
22-OCT-1993;	93US-0000389.	KW XX	
19-AUG-1994;	94US-00292827.	KW XX	
21-OCT-1994;	94WO-US01217.	KW XX	
08-DEC-1994;	94US-00353784.	KW XX	
(NPSP-) NPS PHARM INC. (BGHM) BRIGHAM & WOMENS HOSPITAL.	PA XX		
Balandrin MF, Delmar EG, Moe ST, Nemeth EP, Van Wagenen BC;	PA XX		
WPI; 2000-301969/26.	DR XX		Rattus rattus.
P-PSDB; AAY51828.	PT XX		
Treating disorders or diseases in a patient by modulating inorganic ion receptor activities especially calcium receptor for hyperparathyroidism, by administering a calcimimetic or calcilytic compound.	PT XX		
Example 30; Col 133-140; 194pp; English.	PT XX		
This invention describes a novel method of treating disorders by modulating calcium receptor activity in vitro by administering a calcimimetic, or a calcilytic compound. The products of the invention have osteopathic, cerebroprotective, cytoprotective, neuroprotective, dermatological, tranquilizer, vulnerary, antiluler, immunosuppressive, hypotensive and cardiotonic activity. The method is suitable for reducing parathyroid hormone level in a patient to that of a normal individual, treating a patient having osteoporosis, to inhibit bone resorption, and to stimulate calcitonin secretion in vitro or in vivo. The level of parathyroid hormone is reduced to cause a decrease in plasma Ca2+. The method is useful in treating disorders in humans such as hyperparathyroidism, Paget's disease and osteoporosis. Also for treatment or prevention, based on the affected cells, of other disorders and conditions like seizures, stroke, head trauma, spinal cord injury, hypoxia-induced nerve cell damage such as in cardiac arrest or neonatal distress, epilepsy, Alzheimer's disease, Huntington's disease, Parkinson's disease, dementia, muscle tension, depression, anxiety, panic disorder, OCD (not specified), post-traumatic stress disorder, schizophrenia, neuroleptic malignant syndrome and Tourette's syndrome, diseases involving excess water reabsorption by the kidney such as syndrome of inappropriate ADH secretion (SIADH), cirrhosis, congestive heart failure and nephrosis, hypertension, preventing and/or decreasing renal toxicity from cationic antibiotics (e.g. aminoglycoside antibiotics), gut motility disorders such as diarrhoea and spastic colon, GI (gastrointestinal) ulcer diseases, GI diseases with excessive calcium absorption such as sarcoidosis and autoimmune diseases, organ transplant rejection. This sequence encodes the rat calcium receptor pRakCar3A which is described in the method of the invention.	PT XX		
Sequence 4131 BP; 988 A; 1170 C; 1052 G; 921 T; 0 U; 0 Other;	PS SQ		Van Wagenen BC, Balandrin MF, Delmar EG, Nemeth EP;
Query Match 78.2%; Score 17.2%; DB 3; Length 4131;	CC		XX
Best Local Similarity 63.6%; Pred. No. 1.6e+02;	CC		WPI; 2002-081872/11.
Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0;	CC		P-PSDB; AAB47823.
1 GUGAACUCACUCGAGCAGGUCC 22	CC		Novel inorganic ion receptor-modulating compounds, useful for treating e.g. hyperparathyroidism, osteoporosis, stroke, epilepsy, Alzheimer's disease, dementia, depression, anxiety, hypertension, cirrhosis and spastic colon.
3950 GTGAACTGACTGGTGTGCTCT 3971	CC		Example 30; Fig 50; 227pp; English.
RESULT 10	CC		The sequences given in AAI72120-23 encode various calcium receptor proteins. This sequence encodes a rat calcium receptor. The calcium receptor proteins are used, in conjunction with the compounds of the invention, for structure determination, to assay a molecules activity on a receptor and to obtain antibodies to that receptor. The compounds of the invention, which modulate inorganic ion receptors are useful for treating and diagnosing diseases or disorders which can be treated by modulating inorganic ion receptor activity. This is preferably a disease or disorder characterized by abnormal inorganic ion homeostasis, preferably abnormal calcium homeostasis (hyperparathyroidism, osteoporosis and other bone and mineral-related disorders), an abnormal level of a messenger whose production or secretion is affected by inorganic ion receptor activity, and an abnormal level or activity of a messenger whose function is affected by inorganic ion receptor activity.
AAT72123	CC		These compounds are also useful for treating and diagnosing diseases or messenger whose function is affected by inorganic ion receptor activity.
Db	CC		CC

CC disorders of the central nervous system such as seizures, stroke, head  
 CC trauma, spinal cord injury, hypoxia-induced nerve cell damage such as in  
 CC cardiac arrest or neonatal distress, epilepsy, neurodegenerative diseases such as Alzheimer's disease, Huntington's disease and Parkinson's disease,  
 CC depression, anxiety, panic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, schizophrenia,  
 CC neuroleptic malignant syndrome and Tourette's syndrome, diseases involving excess water reabsorption by the kidney such as inappropriate ADH secretion (SIADH), cirrhosis, congestive heart failure; nephrosis, hypertension, for preventing and/or decreasing renal toxicity from cationic antibiotics (e.g. aminoglycoside antibiotics), gut motility disorders such as diarrhoea, and spastic colon, Gastrointestinal (GI) ulcer diseases, GI diseases with excessive calcium absorption such as sarcoidosis, and autoimmune diseases and organ transplant rejection

XX Sequence 4131 BP; 988 A; 1170 C; 1052 G; 921 T; 0 U; 0 Other;  
 XX Query Match Score 17.2%; DB 6; Length 4131;  
 XX Best Local Similarity 63.6%; Pred. No. 1.6e+02;  
 XX Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GUGAACUCACUCUGAGAGCUCU 22  
 [:|:|:|:|:|:|:|:|:|:  
 Db 3950 GTGAACTGACTGGTGTGCTT 3971

RESULT 11  
 ADO30115 standard; CDNA; 4550 BP.  
 XX AC ADO30115;  
 XX DT 29-JUL-2004 (first entry)  
 XX DE Mouse GPCR CASR polynucleotide, SEQ ID NO:1217.  
 XX KW G protein-coupled receptor; GPCR; drug screening; diagnosis;  
 KW transgenic mouse; neurological disorder; adrenal gland disorder;  
 KW colon disorder; intestinal disorder; cardiovascular disorder;  
 KW muscular disorder; blood disorder; immune disorder; bone disorder;  
 KW joint disorder; metabolic disorder; nutritive disorder; cancer;  
 KW kidney disorder; liver disorder; lung disorder; breast disorder;  
 KW ovary disorder; uterus disorder; prostate disorder; testis disorder;  
 KW skin disorder; stomach disorder; pancreas disorder; spleen disorder;  
 KW thymus disorder; thyroid disorder; anti-parkinsonian; antianoxic;  
 KW cytotoxic; antiinflammatory; vasoactive; antiangina; antiarrhythmic;  
 KW virucide; hepatotropic; antibacterial; antianaemic; antiseborrhoeic;  
 KW dermatological; antiulcer; antithyroid; antihaemorrhoid; anorectic;  
 KW immunosuppressive; nephrotropic; gene therapy; GPCR modulator; mouse;  
 KW murine; gene; ss.  
 XX OS musculus.  
 XX PN WO2004040000-A2.  
 XX PD 13-MAY-2004.  
 XX PF 09-SEP-2003; 2003WO-US028226.  
 XX PR 09-SEP-2002; 2002US-0409303P.  
 PR 09-APR-2003; 2003US-0461329P.  
 XX PA (PRIM-) PRIMAL INC.  
 XX PF 09-SEP-2003; 2003WO-US028226.  
 PI Gaitanaris GA, Bergmann JE, Gragerov A, Hohmann J, Li F;  
 PI Madisen L, Mcilwain KL, Pavlova MN, Vassilatis D, Zeng H;  
 DR WPI: 2004-390329/36.  
 DR P-PSDB; ADO29212.  
 PT Novel mammalian G protein coupled receptors, useful for identifying PT compounds that modulates diagnosing and treating disease condition

associated with GPCR dysfunction e.g. autoimmune diseases, angina pectoris, Parkinson's disease.

XX Claim 151; SEQ ID NO 1217; 542pp; English.

PT The invention relates to human and mouse G protein-coupled receptors (GPCRs) and nucleic acids encoding them. The invention also relates to sequences at least 90% identical to the GPCR proteins and nucleic acids associated with GPCRs of the invention; methods of treating or diagnosing diseases of the invention; methods of preventing or diagnosing diseases associated with GPCRs of the invention; methods of screening for compounds useful in the treatment of GPCR-related diseases; a transgenic mouse comprising a GPCR gene of the invention; a mouse comprising a mutation in a GPCR transgene or in an endogenous GPCR gene; cells derived from the transgenic mice; kits comprising several mice, each of which has a mutation in a different GPCR gene of the invention; and kits comprising probes which hybridise to GPCR polynucleotides of the invention. The invention further discloses variants of the GPCR polypeptides and vectors comprising a GPCR nucleic acid. The GPCR nucleic acids and proteins may be used in the diagnosis, treatment or prevention of a wide variety of diseases including neurological disorders (e.g., Alzheimer's disease, depression, diabetic neuropathy, Parkinson's disease or schizophrenia); disorders of the adrenal gland; disorders of the colon or intestine (e.g., Crohn's disease, diarrhoea, food poisoning or irritable bowel syndrome); cardiovascular disorders (e.g., angina, cardiac arrhythmia or myocardial infarction); muscular disorders; blood disorders (e.g., anaemia or leukaemia); immune disorders (e.g., autoimmune disorders or ATDS); bone and joint disorders (e.g., osteoarthritis, rheumatoid arthritis, gout or osteoporosis); metabolic or nutritive disorders (e.g., obesity, enzyme deficiency-related diseases or vitamin deficiency-related diseases); and disorders of the kidney, liver, lung, breast, ovary, uterus, prostate, testis, skin, stomach, pancreas, spleen, thymus and thyroid (e.g., cancers). The present sequence represents a GPCR-encoding nucleic acid of the invention. Note: The full sequence data for this patent did not form part of the printed specification; those sequences not shown were obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published\_pct\_sequences.

XX Sequence 4550 BP; 1107 A; 1287 C; 1126 G; 1030 T; 0 U; 0 Other;

SQ Query Match Score 78.2%; DB 12; Length 4550;  
 XX Best Local Similarity 63.6%; Pred. No. 1.6e+02;  
 XX Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GUGAACUCACUCUGAGAGCUCU 22  
 [:|:|:|:|:|:|:|:|:|:  
 Db 3891 GTGAACTGACTGGTGTGCTT 3912

RESULT 12  
 ACN44600  
 ID ACN44600 standard; DNA; 57561 BP.  
 XX AC ACN44600;  
 XX DT 18-NOV-2004 (first entry)  
 XX DE Mouse genomic sequence mCG22161.  
 XX ID WO2003073826-A2.  
 XX KW Cytostatic; carcinoma; lymphoma; cancer; murine; gene; ss.  
 XX OS musculus.  
 XX PN WO2003073826-A2.  
 XX PD 12-SEP-2003.  
 XX PR 28-FEB-2003; 2003WO-US006235.  
 XX PR 01-MAR-2002; 2002US-00087192.  
 XX PA (SAGR-) SAGRES DISCOVERY.  
 PI Morris DW;



PT treatment and prevention of bone resorption disorders and for detection  
PT and diagnosis.  
XX

PS Example 1; Page 61; 83pp; English.

XX T-42D human breast carcinoma cells were used to prepare a cDNA library  
CC used for the cloning of calcitonin receptor sequences. AA059009 was used  
CC in first strand cDNA synthesis from the poly(A)- RNA. Human calcitonin  
CC receptors can be used in the development of drugs treatment of bone  
CC resorption disorders. (Updated on 25-MAR-2003 to correct FN field.)  
XX

SQ Sequence 44 BP; 10 A; 7 C; 7 G; 20 T; 0 U; 0 Other;

Query Match 76.4%; Score 16.8; DB 2; Length 44;  
Best Local Similarity 70.0%; Pred. No. 1.2e+02;  
Matches 14; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 3 GAACUCAUCUGUGAGCUU 22  
|:||:||:||:||:||:||:  
Db 12 GAATTCATAGTGAGCTT 31

Search completed: June 24, 2005, 00:22:06  
Job time : 199.283 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compugen Ltd.

OM nucleic - nucleic search, using bw model

Run on: June 23, 2005, 23:58:22 ; Search time 56.4724 Seconds  
(without alignments)

637.445 Million cell updates/sec

Title: US-10-848-737-1

Perfect score: 22

Sequence: 1 gnuacacucacugagucgtt 22

Scoring table: IDENTITY\_NUC

GapOp 10.0 , Gapext 1.0

Searched: 1202784 seqs, 818138359 residues

Total number of hits satisfying chosen parameters: 2405568

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%

Listing first 45 summaries

Database : Issued\_Patents\_NA:\*

- 1: /cgn2\_6/pcodata/1/ina/5A\_COMB.seq:\*
- 2: /cgn2\_6/pcodata/1/ina/5B\_COMB.seq:\*
- 3: /cgn2\_6/pcodata/1/ina/6A\_COMB.seq:\*
- 4: /cgn2\_6/pcodata/1/ina/6B\_COMB.seq:\*
- 5: /cgn2\_6/pcodata/1/ina/PCITS\_COMB.seq:\*
- 6: /cgn2\_6/pcodata/1/ina/backfile1.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query	Match	Length	DB	ID	Description
1	17.2	78.2	4131	1	US-08-485-588-4	Sequence 4, App1	
2	17.2	78.2	4131	1	US-08-484-565-4	Sequence 4, App1	
3	17.2	78.2	4131	2	US-08-480-751-4	Sequence 4, App1	
4	17.2	78.2	4131	2	US-08-943-986-4	Sequence 4, App1	
5	17.2	78.2	4131	3	US-08-253-784-4	Sequence 4, App1	
6	17.2	78.2	4131	3	US-08-484-719B-4	Sequence 4, App1	
7	17.2	78.2	4131	3	US-08-484-159-4	Sequence 4, App1	
8	16.8	76.4	44	1	US-08-361-920-38	Sequence 38, App1	
9	16.8	76.4	44	1	US-08-453-742-15	Sequence 15, App1	
10	16.8	76.4	44	1	US-08-454-444-15	Sequence 15, App1	
11	16.8	76.4	44	1	US-08-453-222-15	Sequence 15, App1	
12	16.8	76.4	44	1	US-08-52-802-15	Sequence 15, App1	
13	16.8	76.4	44	1	US-08-479-919-38	Sequence 38, App1	
14	16.8	76.4	44	1	US-08-483-432-38	Sequence 38, App1	
15	16.8	76.4	44	3	US-09-071-224-12	Sequence 12, App1	
16	16.8	76.4	1902	4	US-09-002-540-2344	Sequence 2344, App1	
17	16.8	76.4	12322	4	US-09-949-016-16446	Sequence 16446, App1	
18	16.8	76.4	12898	4	US-09-302-540-1000	Sequence 1000, App1	
19	16.8	76.4	64610	4	US-09-049-016-12214	Sequence 12214, App1	
20	16.2	73.6	525	4	US-09-583-110-1469	Sequence 1469, App1	
21	16.2	73.6	552	4	US-09-107-433-2198	Sequence 2198, App1	
22	16.2	73.6	1159	3	US-08-558-207A-29	Sequence 29, App1	
23	16.2	73.6	11831	3	US-08-961-527-65	Sequence 65, App1	
24	16.2	73.6	13361	4	US-09-949-016-12478	Sequence 12478, App1	
25	16.2	73.6	13785	4	US-09-949-016-15631	Sequence 15631, App1	
26	16.2	73.6	24428	4	US-09-949-016-17262	Sequence 17262, App1	
27	16.2	73.6	24538	4	US-09-949-016-14264	Sequence 14264, App1	

## ALIGNMENTS

RESULT 1  
US-08-485-588-4  
; Sequence 4, Application US/08485588  
; Patent No. 5688938

GENERAL INFORMATION:

- / APPLICANT: Edward M. Brown
- / APPLICANT: Steven C. Robert
- / APPLICANT: Forrest H. Fuller
- / APPLICANT: James E. Garrett, Jr.
- / TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE
- / NUMBER OF SEQUENCES: 20
- / CORRESPONDENCE ADDRESS:
- / ADDRESSEE: Lyon & Lyon
- / STREET: First Interstate World Center
- / STREET: Suite 4700
- / STREET: 633 West Fifth Street
- / CITY: Los Angeles
- / STATE: California
- / COUNTRY: USA
- / ZIP: 90071

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

COMPUTER: IBM PC Compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: FASTSEQ

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/485,588

FILING DATE: 7 June, 1995

CLASSIFICATION: 435

PRIOR APPLICATION DATA:

PRIOR APPLICATION DATA: including application prior application data, described below: 9

APPLICATION NUMBER: 08/355,784

FILING DATE: 9 December, 1994

APPLICATION NUMBER: PCT/US/94/12117

FILING DATE: 21 October, 1994

APPLICATION NUMBER: U.S. 08/292,827

FILING DATE: 23 August, 1994

APPLICATION NUMBER: U.S. 08/141,248

FILING DATE: 22 October, 1993

APPLICATION NUMBER: U.S. 08/099,389

FILING DATE: 23 February, 1993

APPLICATION NUMBER: U.S. 08/017,127

FILING DATE: 12 February, 1993

APPLICATION NUMBER: U.S. 07/94,161

FILING DATE: 21 August, 1992

APPLICATION NUMBER: U.S. 07/834,044

FILING DATE: 11 February, 1992

APPLICATION NUMBER: U.S. 07/749,451



FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US/94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REFERENCE/DOCKET NUMBER: 213/004  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEFAX: (213) 955-0440  
 TELEX: 67-3510  
 INFORMATION FOR SEQ ID NO: 4:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 4131 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: cDNA to mRNA  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 574..3810  
 OTHER INFORMATION:  
 US-08-480-751-4

Query Match 78.2%; Score 17.2; DB 2; Length 4131;

Best Local Similarity 63.6%; Pred. No. 47;  
 Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GUGAACUACUGAGGUCUCC 22

Db 3950 GTGAACTGACTGGTGTGCTT 3971

RESULT 4

US-08-943-986-4

Sequence 4, Application US/08943986

Patent No. 5962314

GENERAL INFORMATION:  
 APPLICANT: Edward M. Brown  
 APPLICANT: Steven C. Hebert  
 APPLICANT: James E. Garrett, Jr.  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 TITLE OF INVENTION: MOLECULES  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 STATE: Los Angeles  
 CITY: California  
 COUNTRY: USA  
 ZIP: 90071

COMPUTER READABLE FORM:

MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: FASTSEQ

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/943,986  
 FILING DATE: 03-OCT-1997  
 CLASSIFICATION: 530  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: 08/484,565  
 FILING DATE: 7-JUNE-1995  
 APPLICATION NUMBER: 08/353,784  
 FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US/94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REFERENCE/DOCKET NUMBER: 213/004  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEFAX: (213) 955-0440  
 TELEX: 67-3510  
 INFORMATION FOR SEQ ID NO: 4:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 4131 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: cDNA to mRNA  
 FEATURE:  
 NAME/KEY: CDS  
 LENGTH: 4131 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: cDNA to mRNA  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 574..3810  
 OTHER INFORMATION:  
 US-08-480-751-4

Query Match 78.2%; Score 17.2; DB 2; Length 4131;

Best Local Similarity 63.6%; Pred. No. 47;  
 Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GUGAACUACUGAGGUCUCC 22

Db 3950 GTGAACTGACTGGTGTGCTT 3971

RESULT 5

US-08-353-784-4

Sequence 4, Application US/08353784

Patent No. 6011058

GENERAL INFORMATION:

APPLICANT: Edward F. Nemeth, Edward M. Brown, Steven C. Hebert, Bradford C. Van Wagenen, Manuel F. Balandrin, Forrest H. Fuller, Eric G. Delmar, and Scott T. Moe  
 APPLICANT: TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 APPLICANT: TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: Lyon & Lyon

STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles

STATE: California  
 COUNTRY: USA  
 ZIP: 90071  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: FASTSEQ  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/353,784  
 FILING DATE: 9 December, 1994  
 CLASSIFICATION: 514  
 PRIOR APPLICATION DATA:  
 PRIOR APPLICATION DATA: including application  
 described below: 8  
 PRIORITY NUMBER: PCT/US/94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: US/08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: US/08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: US/08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: US/08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: US/07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: US/07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: US/07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REFERENCE/DOCKET NUMBER: 209/069  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEX: 67-3510  
 INFORMATION FOR SEQ ID NO: 4:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 4131 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: cDNA to mRNA  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 574..3810  
 OTHER INFORMATION:  
 US-08-353-784-4

RESULT 6  
 US-08-484-719B-4  
 Sequence 4, Application US/08484719B  
 Patent No. 6031003  
 GENERAL INFORMATION:  
 APPLICANT: Edward F. Nemeth, Edward M.  
 APPLICANT: Bradford C. Van Wagenen,  
 APPLICANT: Manuel F. Balandrin,  
 APPLICANT: Forrest H. Fuller, Eric G.  
 APPLICANT: Delmar, Scott T. Moe  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE

Query Match 78.2%; Score 17.2; DB 3; Length 4131;  
 Best Local Similarity 63.6%; Pred. No. 47; Pred. No. 47;  
 Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 1 GUGAACUCACUGGAGCUCCTT 22  
 Db 3950 GTGAACTGACTGGGTGCTT 3971

Query Match 78.2%; Score 17.2; DB 3; Length 4131;  
 Best Local Similarity 63.6%; Pred. No. 47; Pred. No. 47;  
 Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

QY 1 GUGAACUCACUGGAGCUCCTT 22  
 Db 3950 GTGAACTGACTGGGTGCTT 3971

RESULT 7  
 US-08-484-159-4  
 Sequence 4, Application US/08484159  
 Patent No. 6313146  
 GENERAL INFORMATION:

APPLICANT: Bradford C. Van Wagenen  
 APPLICANT: Manuel F. Balandrin  
 APPLICANT: Eric G. Del Mar  
 TITLE OF INVENTION: CALCIUM RECEPTOR-ACTIVE  
 NUMBER OF INVENTION: MOLECULES  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEES: Lyon & Lyon  
 STREET: First Interstate World Center  
 STREET: Suite 4700  
 STREET: 633 West Fifth Street  
 CITY: Los Angeles  
 STATE: California  
 COUNTRY: USA  
 ZIP: 90071  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: 3.5" Diskette, 1.44 Mb storage  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: FASTSEQ  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/484,159  
 FILING DATE: 7 June, 1995  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 PRIOR APPLICATION DATA: including application  
 PRIOR APPLICATION DATA: described below: 9  
 APPLICATION NUMBER: 08/353,784  
 FILING DATE: 9 December, 1994  
 APPLICATION NUMBER: PCT/US/94/12117  
 FILING DATE: 21 October, 1994  
 APPLICATION NUMBER: U.S. 08/292,827  
 FILING DATE: 23 August, 1994  
 APPLICATION NUMBER: U.S. 08/141,248  
 FILING DATE: 22 October, 1993  
 APPLICATION NUMBER: U.S. 08/009,389  
 FILING DATE: 23 February, 1993  
 APPLICATION NUMBER: U.S. 08/017,127  
 FILING DATE: 12 February, 1993  
 APPLICATION NUMBER: U.S. 07/934,161  
 FILING DATE: 21 August, 1992  
 APPLICATION NUMBER: U.S. 07/834,044  
 FILING DATE: 11 February, 1992  
 APPLICATION NUMBER: U.S. 07/749,451  
 FILING DATE: 23 August, 1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Heber, Sheldon O.  
 REGISTRATION NUMBER: 38,179  
 REFERENCE/DOCKET NUMBER: 214/101  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (213) 489-1600  
 TELEX: 67-3510  
 INFORMATION FOR SEQ ID NO: 4:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 4131 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: cDNA to mRNA  
 FEATURE:  
 NAME/KEY: CDS  
 LOCATION: 574..3810  
 OTHER INFORMATION:  
 US-08-484-159-4

Query Match 78.2%; Score 17.2%; DB 3; Length 4131;  
 Best Local Similarity 63.6%; Pred. No. 47;  
 Matches 14; Conservative 5; Mismatches 3; Indels 0; Gaps 0;

Qy 1 GUGAACUCACUGAGGUCUT 22  
 :|||:|||:|||:|||:|||:|||

Db 3950 GTGAACTGACTGGTGTGCTCTT 3971  
 RESULT 8  
 US-08-361-920-38  
 / Sequence 38, Application US/08361920  
 / Patent No. 5457046  
 / GENERAL INFORMATION:  
 / APPLICANT: Woidike, Helle F.  
 / APPLICANT: Hagen, Frederick  
 / APPLICANT: Hjort, Carsten M.  
 / APPLICANT: Sven, Hastrup  
 / TITLE OF INVENTION: An Enzyme Capable of Degrading Cellulose  
 / NUMBER OF SEQUENCES: 85  
 / CORRESPONDENCE ADDRESS:  
 / ADDRESSEE: No. 5457046 No. 5457046disk of NO. 5457046th America, Inc.  
 / STREET: 405 Lexington Avenue, 62nd Floor  
 / CITY: New York  
 / STATE: New York  
 / COUNTRY: United States of America  
 / ZIP: 10174-6201  
 / COMPUTER READABLE FORM:  
 / MEDIUM TYPE: Floppy disk  
 / COMPUTER: IBM PC compatible  
 / OPERATING SYSTEM: PC DOS/MS-DOS  
 / SOFTWARE: Patentin Release #1.1, Version #1.25  
 / CURRENT APPLICATION DATA:  
 / APPLICATION NUMBER: US/08/361,920  
 / PRIOR APPLICATION DATA:  
 / FILING DATE:  
 / CLASSIFICATION: 435  
 / PRIOR APPLICATION DATA:  
 / APPLICATION NUMBER: US 07/940,860  
 / FILING DATE: 28-OCT-1992  
 / APPLICATION NUMBER: DK 1158/90  
 / FILING DATE: 09-MAY-1990  
 / PRIOR APPLICATION DATA:  
 / APPLICATION NUMBER: PCT/DK91/00124  
 / FILING DATE: 08-MAY-1991  
 / ATTORNEY/AGENT INFORMATION:  
 / NAME: Lambiris, Elias J.  
 / REGISTRATION NUMBER: 33,728  
 / REFERENCE/DOCKET NUMBER: 3435.204-US  
 / TELECOMMUNICATION INFORMATION:  
 / TELEPHONE: 212-867-0123  
 / TELEFAX: 212-867-0298  
 / INFORMATION FOR SEQ ID NO: 38:  
 / SEQUENCE CHARACTERISTICS:  
 / LENGTH: 44 base pairs  
 / TYPE: nucleic acid  
 / STRANDEDNESS: single  
 / TOPOLOGY: linear  
 / MOLECULE TYPE: DNA (genomic)  
 US-08-361-920-38

Query Match 76.4%; Score 16.8%; DB 1; Length 44;  
 Best Local Similarity 70.0%; Pred. No. 43;  
 Matches 14; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 3 GAACUCAUCUGAGCUCUT 22  
 |||:|||:|||:|||:|||  
 Db 12 GAATTCACTAGTGAGCTCTT 31

RESULT 9  
 US-08-453-742-15  
 / Sequence 15, Application US/08453742  
 / Patent No. 5622839  
 / GENERAL INFORMATION:  
 / APPLICANT: Moore, Emma E.  
 / APPLICANT: Sheppard, Paul O.  
 / APPLICANT: Kuestner, Rolf O.  
 / TITLE OF INVENTION: Human Calcitonin Receptor

```

NUMBER OF SEQUENCES : 27
CORRESPONDENCE ADDRESS: TOWNSEND AND TOWNSEND KHOURIE and CREW
ADDRESSEE: Townsend and Townsend Khourie
STREET: One Market Plaza, Steuart St. Tower,
STREET: Twentieth Floor
CITY: San Francisco
STATE: CA
COUNTRY: USA
ZIP: 94105-1492
COMPUTER READABLE FORM: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/453,742
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/100,887
FILING DATE:
APPLICATION NUMBER: US 07/954,804
FILING DATE: 30-SEP-1992
ATTORNEY/AGENT INFORMATION:
NAME: Pardee, Steven W
REGISTRATION NUMBER: 31,990
REFERENCE/DOCKET NUMBER: 13952-15-1
TELECOMMUNICATION INFORMATION:
TELEPHONE: 206-467-9600
TELEX/FAX: 415-543-5043
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 44 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
CLONE: ZC2938
US-08-453-742-15

RESULT 10
Query Match Score 16.8; DB 1; Length 76.4%
Best Local Similarity 70.0%; Preid. No. 43;
Matches 14; Conservative 4; Mismatches 2; Indels 1
GENERAL INFORMATION:
APPLICANT: Moore, Emma E
APPLICANT: Sheppard, Paul O
APPLICANT: Kuester, Holan E
TITLE OF INVENTION: Human Calcitonin Receptor
NUMBER OF SEQUENCES: 27
CORRESPONDENCE ADDRESS: TOWNSEND AND TOWNSEND KHOURIE and CREW
ADDRESSEE: Townsend and Townsend Khourie
STREET: One Market Plaza, Steuart St. Tower,
STREET: Twentieth Floor
CITY: San Francisco
STATE: CA
COUNTRY: USA
ZIP: 94105-1492
COMPUTER READABLE FORM: Floppy disk
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:

```

INFORMATION FOR SEQ ID NO: 15:  
 / SEQUENCE CHARACTERISTICS:  
 / LENGTH: 44 base pairs  
 / TYPE: nucleic acid  
 / STRANDEDNESS: single  
 / TOPOLOGY: linear  
 / IMMEDIATE SOURCE:  
 / CLONE: ZC2938  
 US-08-453-222-15

Query Match 76.4%; Score 16.8; DB 1; Length 44;  
 Best Local Similarity 70.0%; Pred. No. 43;  
 Matches 14; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
 Qy 3 GAACUCACUCUGAGGCUU 22  
 Db 12 GAATTCACTAGTGAGCTT 31

RESULT 12  
 US-08-452-802-15  
 / Sequence 15, Application US/08452802  
 / Patent No. 5683884  
 / GENERAL INFORMATION:  
 / APPLICANT: Moore, Emma E  
 / APPLICANT: Sheppard, Paul O  
 / APPLICANT: Kuestner, Rolf E  
 / TITLE OF INVENTION: Human Calcitonin Receptor  
 / NUMBER OF SEQUENCES: 27  
 / CORRESPONDENCE ADDRESS:  
 / ADDRESS: TOWNSEND AND TOWNSEND KHOURIE and CREW  
 / STREET: One Market Plaza, Steuart St. Tower,  
 / STREET: Twentieth Floor  
 / CITY: San Francisco  
 / STATE: CA  
 / COUNTRY: USA  
 / ZIP: 94105-1492  
 / COMPUTER READABLE FORM:  
 / MEDIUM TYPE: Floppy disk  
 / COMPUTER: IBM PC compatible  
 / OPERATING SYSTEM: PC-DOS/MS-DOS  
 / SOFTWARE: PatentIn Release #1.0, Version #1.25  
 / CURRENT APPLICATION DATA:  
 / APPLICATION NUMBER: US/08/452,802  
 / FILING DATE: 30-MAY-1995  
 / CLASSIFICATION: 435  
 / PRIOR APPLICATION DATA:  
 / APPLICATION NUMBER: US/08/361,920  
 / FILING DATE: 22-DEC-1994  
 / APPLICATION NUMBER: US 07/940,860  
 / FILING DATE: 28-OCT-1992  
 / APPLICATION NUMBER: DK 1158/90  
 / FILING DATE: 09-MAY-1990  
 / PRIOR APPLICATION DATA:  
 / APPLICATION NUMBER: PCT/DK91/00124  
 / FILING DATE: 08-MAY-1991  
 / ATTORNEY/AGENT INFORMATION:  
 / NAME: Lambiris, Elias J.  
 / REGISTRATION NUMBER: 33,728  
 / REFERENCE/DOCKET NUMBER: 3435.204-US  
 / TELECOMMUNICATION INFORMATION:  
 / TELEPHONE: 212-867-0298  
 / TELEFAX: 212-867-0123  
 / INFORMATION FOR SEQ ID NO: 38:  
 / SEQUENCE CHARACTERISTICS:  
 / LENGTH: 44 base pairs  
 / TYPE: nucleic acid  
 / STRANDEDNESS: single  
 / TOPOLOGY: linear  
 / MOLECULE TYPE: DNA (genomic)  
 / US-08-479-939-38

Query Match 76.4%; Score 16.8; DB 1; Length 44;  
 Best Local Similarity 70.0%; Pred. No. 43;  
 Matches 14; Conservative 4; Mismatches 2; Indels 0; Gaps 0;  
 Qy 3 GAACUCACUCUGAGGCUU 22  
 Db 12 GAATTCACTAGTGAGCTT 31

RESULT 14  
 US-08-48-432-38  
 / Sequence 38, Application US/08183432  
 / Patent No. 5763234  
 / GENERAL INFORMATION:  
 / APPLICANT: Woeldike, Helle F.

APPLICANT: Hagen, Frederick  
 APPLICANT: Hjort, Carsten M.  
 APPLICANT: Sven, Hasstrup  
 TITLE OF INVENTION: An Enzyme Capable of Degrading Cellulose  
 NUMBER OF SEQUENCES: 85  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: No. 5763254 No. 5763254disk of No. 5763254th America, Inc.  
 STREET: 405 Lexington Avenue, 62nd Floor  
 CITY: New York  
 STATE: New York  
 COUNTRY: United States of America  
 ZIP: 10174-6201  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/483,432  
 FILING DATE: 07-JUN-1995  
 CLASSIFICATION: 435  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US/08/361,920  
 FILING DATE:  
 APPLICATION NUMBER: US 07/940,860  
 FILING DATE: 28-OCT-1992  
 APPLICATION NUMBER: DK 1158/90  
 FILING DATE: 09-MAY-1990  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: PCT/DK91/00124  
 FILING DATE: 08-MAY-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Lambiris, Elias J.  
 REGISTRATION NUMBER: 33,728  
 REFERENCE/DOCKET NUMBER: 3435.204-US  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 212-867-0123  
 INFORMATION FOR SEQ ID NO: 38:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 44 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: DNA (Genomic)  
 US-08-483-432-38

STREET: 1201 Eastlake Ave East  
 CITY: Seattle  
 STATE: WA  
 COUNTRY: USA  
 ZIP: 98102  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Diskette  
 COMPUTER: IBM Compatible  
 OPERATING SYSTEM: DOS  
 SOFTWARE: FastSEQ for Windows Version 2.0  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/09/071,224  
 FILING DATE:  
 CLASSIFICATION:  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER:  
 FILING DATE:  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Lunn, Paul G.  
 REGISTRATION NUMBER: 32,743  
 REFERENCE/DOCKET NUMBER: 96-22  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 206-442-6627  
 TELEFAX: 206-442-6678  
 TELEX:  
 INFORMATION FOR SEQ ID NO: 12:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 44 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: single  
 TOPOLOGY: linear  
 MOLECULE TYPE: Other  
 US-09-071-224-12

Query Match 76.4%; Score 16.8; DB 3; Length 44;  
 Best Local Similarity 70.0%; Pred. No 43; Matches 14; Indels 0; Gaps 0;  
 Matches 14; Conservative 4; Mismatches 2;

Qy	3 GAACTACATGUGAGCUCTT 22
Db	12 GAATTCACTAGTGAGCTTT 31

Search completed: June 24, 2005, 04:11:08  
 Job time: 64.4724 secs

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RESULT 15  
 US-09-071-224-12  
 Sequence 12, Application US/09/071224  
 Patent No. 627143  
 GENERAL INFORMATION:  
 APPLICANT: Lok, Si  
 APPLICANT: Presnell, Scott R.  
 APPLICANT: Jeimberg, Anna C.  
 APPLICANT: Gilbert, Teresa  
 APPLICANT: Foster, Donald C.  
 APPLICANT: Adams, Robyn L.  
 APPLICANT: Lechner, Joyce M.  
 TITLE OF INVENTION: MAMMALIAN ZYTOXINS  
 NUMBER OF SEQUENCES: 37  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: ZymoGenetics



US-10-848-737-1  
 Query Match 100.0%; Score 22; DB 21; Length 22;  
 Best Local Similarity 100.0%; Pred. No. 0.37%; Indels 0; Gaps 0;  
 Matches 22; Conservative 0; Mismatches 0;  
 Qy 1 GUGACUCACUGAGCUCCTT 22  
 Db 1 GUGACUCACUGAGCUCCTT 22

---

RESULT 2  
 US-10-831-901A-780/C  
 Sequence 780, Application US/10831901A  
 Publication No. US20050100885A1  
 GENERAL INFORMATION:  
 APPLICANT: Crooke, Stanley T.  
 APPLICANT: Ecker, David J.  
 APPLICANT: Sampath, Rangarajan  
 APPLICANT: Freier, Susan M.  
 APPLICANT: Massire, Christian  
 APPLICANT: Hofstader, Steven A.  
 APPLICANT: Lowery, Kristin Sannes  
 APPLICANT: Swaze, Eric  
 APPLICANT: Baker, Brenda F.  
 APPLICANT: Bennett, C. Frank  
 TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe Acute Respiratory Syndrome (SARS)  
 FILE REFERENCE: IISI0083-100 (BIO100008US)  
 CURRENT APPLICATION NUMBER: US/10/831,901A  
 CURRENT FILING DATE: 2004-04-26  
 PRIOR APPLICATION NUMBER: 60/166,426  
 PRIOR FILING DATE: 2003-04-28  
 PRIOR APPLICATION NUMBER: 60/168,562  
 PRIOR FILING DATE: 2003-05-06  
 PRIOR APPLICATION NUMBER: 60/167,770  
 PRIOR FILING DATE: 2003-04-30  
 PRIOR APPLICATION NUMBER: 60/168,627  
 PRIOR FILING DATE: 2003-05-10  
 PRIOR APPLICATION NUMBER: 60/167,637  
 PRIOR FILING DATE: 2003-05-27  
 NUMBER OF SEQ ID NOS: 30063  
 SOFTWARE: FastqSEQ for Windows Version 4.0  
 LENGTH: 20  
 TYPE: DNA  
 ORGANISM: Artificial Sequence  
 FEATURE:  
 OTHER INFORMATION: Antisense compound  
 US-10-831-901A-780  
 Query Match 90.9%; Score 20; DB 21; Length 20;  
 Best Local Similarity 75.0%; Pred. No. 3.8%; Indels 0; Gaps 0;  
 Matches 15; Conservative 5; Mismatches 0;  
 Qy 1 GUGACUCACUGAGCUC 20  
 Db 20 GTGAACTCACTCGTGAGTC 1

---

RESULT 3  
 US-10-831-901A-29766  
 Sequence 29766, Application US/10831901A  
 Publication No. US20050100885A1  
 GENERAL INFORMATION:  
 APPLICANT: Crooke, Stanley T.  
 APPLICANT: Ecker, David J.  
 APPLICANT: Sampath, Rangarajan  
 APPLICANT: Freier, Susan M.  
 APPLICANT: Massire, Christian  
 APPLICANT: Hofstader, Steven A.

---

RESULT 4  
 US-10-639-936-4  
 Sequence 4, Application US/10699936  
 Publication No. US20050095582A1  
 GENERAL INFORMATION:  
 APPLICANT: Gilliam-Ross, Laura  
 APPLICANT: Taylor, Jill  
 APPLICANT: Scholl, David R.  
 APPLICANT: Wentworth, David E.  
 APPLICANT: Jollieck, Joseph D.  
 TITLE OF INVENTION: Compositions And Methods for Detecting Severe Acute Respiratory Syndrome Coronavirus  
 FILE REFERENCE: DHT-07986  
 CURRENT APPLICATION NUMBER: US/10/699,936  
 CURRENT FILING DATE: 2003-11-03  
 NUMBER OF SEQ ID NOS: 87  
 SOFTWARE: PatentIn version 3.2  
 SEQ ID NO 4  
 LENGTH: 1706  
 TYPE: DNA  
 ORGANISM: SARS-CoV Shanghai LY

---

RESULT 5  
 US-10-639-936-14  
 Sequence 14, Application US/10699936  
 ; Sequence 14, Application US/10699936

Publication No. US20050095582A1  
 GENERAL INFORMATION:  
 APPLICANT: Gillim-Ross, Laura  
 APPLICANT: Scholl, David R.  
 APPLICANT: Wentworth, David E.  
 APPLICANT: Jolllick, Joseph D.  
 TITLE OF INVENTION: Compositions and Methods for Detecting Severe Acute Respiratory Syndrome Coronavirus  
 FILE REFERENCE: DHI-07986  
 CURRENT APPLICATION NUMBER: US/10/699,936  
 CURRENT FILING DATE: 2003-11-03  
 NUMBER OF SEQ ID NOS: 87  
 SOFTWARE: PatentIn version 3.2  
 SEQ ID NO 14  
 LENGTH: 1706  
 TYPE: DNA  
 ORGANISM: SARS coronavirus Shanghai LY  
 US-10-699-936-14

Query Match 90.9%; Score 20; DB 21; Length 1706;  
 Best Local Similarity 75.0%; Pred. No. 4.3;  
 Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GUGAACUACUCGUGAGCU 20  
 Db 69 GTGAACTCACTCGTGAGCTC 716

RESULT 6  
 US-10-889-447-3  
 Sequence 3, Application US/10889447  
 Publication No. US20050075307A1  
 GENERAL INFORMATION:  
 APPLICANT: Bennett, C. Frank  
 APPLICANT: Jain, Ravi  
 TITLE OF INVENTION: MODULATION OF AMINOPEPTIDASE N EXPRESSION  
 FILE REFERENCE: RTS-0685US  
 CURRENT APPLICATION NUMBER: US/10/889,447  
 CURRENT FILING DATE: 2004-07-12  
 PRIOR APPLICATION NUMBER: 60/486,670  
 PRIOR FILING DATE: 2003-07-12  
 NUMBER OF SEQ ID NOS: 241  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 SEQ ID NO 3  
 LENGTH: 24774  
 TYPE: DNA  
 ORGANISM: SARS coronavirus isolate BJ01  
 FEATURE:  
 NAME/KEY: misc\_feature  
 LOCATION:  
 OTHER INFORMATION: n is any nucleotide

Qy 1 GUGAACUACUCGUGAGCU 20  
 Db 706 GTGAACTCACTCGTGAGCTC 725

RESULT 7  
 US-10-831-901A-29748  
 Sequence 29748, Application US/10831901A  
 Publication No. US20050100885A1  
 GENERAL INFORMATION:  
 APPLICANT: Crooke, Stanley T.  
 APPLICANT: Ecker, David J.  
 APPLICANT: Sampath, Rangarajan  
 APPLICANT: Freier, Susan M.  
 APPLICANT: Massire, Christian

APPLICANT: Hoffstadler, Steven A.  
 APPLICANT: Lowry, Kristin Sannes  
 APPLICANT: Swartz, Eric F.  
 APPLICANT: Baker, Brenda F.  
 APPLICANT: Bennett, C. Frank  
 TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe Acute Respiratory Syndrome (SARS)  
 FILE REFERENCE: ISIS0083-100 (BIO008US)  
 CURRENT APPLICATION NUMBER: US/10/831,901A  
 CURRENT FILING DATE: 2004-04-16  
 PRIOR APPLICATION NUMBER: 60/446,426  
 PRIOR FILING DATE: 2003-04-28  
 PRIOR APPLICATION NUMBER: 60/468,562  
 PRIOR FILING DATE: 2003-05-06  
 PRIOR APPLICATION NUMBER: 60/467,770  
 PRIOR FILING DATE: 2003-04-30  
 PRIOR APPLICATION NUMBER: 60/468,627  
 PRIOR FILING DATE: 2003-05-06  
 PRIOR APPLICATION NUMBER: 60/477,637  
 PRIOR FILING DATE: 2003-06-10  
 PRIOR APPLICATION NUMBER: 60/483,579  
 PRIOR FILING DATE: 2003-06-27  
 NUMBER OF SEQ ID NOS: 30083  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 SEQ ID NO 29748  
 LENGTH: 24774  
 TYPE: DNA  
 ORGANISM: SARS Coronavirus  
 FEATURE:  
 NAME/KEY: misc\_feature  
 LOCATION:  
 LOCATION: 860-359, 2089-2188, 2478-2577, 2877-2976, 3576-3675, 3865-3964,  
 LOCATION: 4134-4233, 4563-4662, 5012-5111, 5781-5879, 7438-7537, 7837-7936,  
 LOCATION: 8616-8715, 12055-12124, 13984-14053, 16463-16562, 16932-17031,  
 LOCATION: 17381-17480, 18090-18189, 19019-19118, 19478-19577, 20357-20456,  
 LOCATION: 21086-21185, 21945-22044, 23174-23273, 23531  
 OTHER INFORMATION: n = A,T,C or G  
 US-10-831-901A-29748

Query Match 90.9%; Score 20; DB 21; Length 24774;  
 Best Local Similarity 75.0%; Pred. No. 4.6;  
 Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GUGAACUACUCGUGAGCU 20  
 Db 706 GTGAACTCACTCGTGAGCTC 725

RESULT 8  
 US-10-889-101-3  
 Sequence 3, Application US/10889101  
 Publication No. US20050107324A1  
 GENERAL INFORMATION:  
 APPLICANT: Bennett, C. Frank  
 APPLICANT: Dobie, Kenneth W.  
 APPLICANT: Jain, Ravi  
 TITLE OF INVENTION: MODULATION OF CEACAM1 EXPRESSION  
 FILE REFERENCE: ISIS0101-100 (RTS-0655US)  
 CURRENT APPLICATION NUMBER: US/10/889,101  
 CURRENT FILING DATE: 2004-07-12  
 PRIOR APPLICATION NUMBER: 60/486,652  
 PRIOR FILING DATE: 2003-07-12  
 NUMBER OF SEQ ID NOS: 299  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 SEQ ID NO 3  
 LENGTH: 24774  
 TYPE: DNA  
 ORGANISM: SARS Coronavirus isolate BJ01  
 FEATURE:  
 NAME/KEY: misc\_feature  
 LOCATION:  
 OTHER INFORMATION: n is any nucleotide

Qy 1 GUGAACUACUCGUGAGCU 20  
 Db 706 GTGAACTCACTCGTGAGCTC 725

RESULT 7  
 US-10-831-901A-29748  
 Sequence 29748, Application US/10831901A  
 Publication No. US20050100885A1  
 GENERAL INFORMATION:  
 APPLICANT: Crooke, Stanley T.  
 APPLICANT: Ecker, David J.  
 APPLICANT: Sampath, Rangarajan  
 APPLICANT: Freier, Susan M.  
 APPLICANT: Massire, Christian

Query Match 90.9%; Score 20; DB 21; Length 24774;  
 Best Local Similarity 75.0%; Pred. No. 4.6;  
 Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
 SEQ ID NO 5 LENGTH: 28920

Organism: SARS coronavirus isolate BJ03  
 Feature: misc\_feature  
 Name/Key: misc\_feature  
 Location:  
 Other Information: n is any nucleotide

RESULT 9  
 US-10-889-447-5  
 Sequence 5, Application US/10889447  
 Publication No. US20050075307A1  
 GENERAL INFORMATION:  
 APPLICANT: Bennett, C. Frank  
 ATTORNEY: Jain, Ravi  
 TITLE OF INVENTION: MODULATION OF AMINOPEPTIDASE N EXPRESSION  
 CURRENT APPLICATION NUMBER: US/10/889,447  
 FILE REFERENCE: RTS-0685US  
 PRIOR FILING DATE: 2004-07-12  
 NUMBER OF SEQ ID NOS: 241  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 SEQ ID NO 5 LENGTH: 28920

Organism: SARS coronavirus isolate BJ03  
 Feature: misc\_feature  
 Name/Key: misc\_feature  
 Location:  
 Other Information: n is any nucleotide

Query Match 90.9%; Score 20; DB 21; Length 28920;  
 Best Local Similarity 75.0%; Pred. No. 4.6;  
 Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;  
 SEQ ID NO 6 LENGTH: 28920

Organism: SARS coronavirus isolate BJ04  
 Feature: misc\_feature  
 Name/Key: misc\_feature  
 Location:  
 Other Information: n is any nucleotide

RESULT 10  
 US-10-889-447-6  
 Sequence 6, Application US/10889447  
 Publication No. US20050075307A1  
 GENERAL INFORMATION:  
 APPLICANT: Bennett, C. Frank  
 ATTORNEY: Jain, Ravi  
 TITLE OF INVENTION: MODULATION OF AMINOPEPTIDASE N EXPRESSION  
 FILE REFERENCE: RTS-0685US  
 CURRENT APPLICATION NUMBER: US/10/889,447  
 PRIOR FILING DATE: 2004-07-12  
 NUMBER OF SEQ ID NOS: 241  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 SEQ ID NO 6 LENGTH: 28920

Organism: SARS coronavirus isolate BJ04  
 Feature: misc\_feature  
 Name/Key: misc\_feature  
 Location:  
 Other Information: n is any nucleotide

Query Match 90.9%; Score 20; DB 21; Length 28920;  
 Best Local Similarity 75.0%; Pred. No. 4.6;  
 Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

---

Qy 1 GUGAACUCACUCGUGAGCU 20  
 Db 776 GTGAACTCACTCGTGAATC 725

RESULT 11  
 US-10-831-901A-29740  
 Sequence 29740, Application US/10831901A  
 Publication No. US20050100885A1  
 GENERAL INFORMATION:  
 APPLICANT: Crooke, Stanley T.  
 ATTORNEY: Becker, David J.  
 Name/Key: Sampath, Rangarajan  
 Location:  
 Other Information: Acute Respiratory Syndrome (SARS)

APPLICANT: Freier, Susan M.  
 ATTORNEY: Massire, Christian  
 Name/Key: Hofstader, Steven A.  
 Location:  
 Other Information: Lowery, Kristin Sannes

APPLICANT: Swaize, Eric  
 ATTORNEY: Baker, Brenda F.  
 Name/Key: Bennett, C. Frank  
 Location:  
 Other Information: Compositions And Methods For The Treatment Of Severe

APPLICANT: Baker, Brenda F.  
 ATTORNEY: Bennett, C. Frank  
 Name/Key: Sampath, Rangarajan  
 Location:  
 Other Information: Acute Respiratory Syndrome (SARS)

TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe  
 FILE REFERENCE: IIS/S0081-100 (BIO000081US)  
 CURRENT APPLICATION NUMBER: US/10/831,901A  
 CURRENT FILING DATE: 2004-04-26  
 PRIOR APPLICATION NUMBER: 60/466,426  
 PRIOR FILING DATE: 2003-04-28  
 PRIOR APPLICATION NUMBER: 60/468,562  
 PRIOR FILING DATE: 2003-05-06  
 PRIOR APPLICATION NUMBER: 60/467,770  
 PRIOR FILING DATE: 2003-04-30  
 PRIOR APPLICATION NUMBER: 60/468,627  
 PRIOR FILING DATE: 2003-05-06  
 PRIOR APPLICATION NUMBER: 60/477,637  
 PRIOR FILING DATE: 2003-06-10  
 PRIOR APPLICATION NUMBER: 60/483,579  
 PRIOR FILING DATE: 2003-06-27  
 NUMBER OF SEQ ID NOS: 30063  
 SOFTWARE: FastSEQ for Windows Version 4.0  
 SEQ ID NO 29740 LENGTH: 28920

Organism: SARS Coronavirus  
 Feature:  
 Name/Key: misc\_feature  
 Location:  
 Other Information: n = A,T,C or G

RESULT 12  
 US-10-889-101-5  
 Sequence 5, Application US/10889101  
 Publication No. US20050107324A1  
 GENERAL INFORMATION:  
 APPLICANT: Bennett, C. Frank  
 ATTORNEY: Dobie, Kenneth W.  
 Name/Key: Jain, Ravi  
 Location:  
 Other Information: MODULATION OF CEACAM1 EXPRESSION

TITLE OF INVENTION: MODULATION OF CEACAM1 EXPRESSION  
 FILE REFERENCE: IIS/S010-100 (RTS-0655US)  
 CURRENT APPLICATION NUMBER: US/10/889,101  
 CURRENT FILING DATE: 2004-07-12  
 PRIOR APPLICATION NUMBER: 60/486,652  
 PRIOR FILING DATE: 2003-07-12  
 NUMBER OF SEQ ID NOS: 298

Qy 1 GUGAACUCACUCGUGAGCU 20

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 5 LENGTH: 28920 TYPE: DNA

ORGANISM: SARS Coronavirus isolate BJ03 FEATURE: misc\_feature NAME/KEY: misc\_feature LOCATION:

OTHER INFORMATION: n = A,T,C or G US-10-889-101-5

Query Match Score 20; DB 21; Length 28920; Best Local Similarity 75.0%; Pred. No. 4.6%; Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0; Software: FastSEQ for Windows Version 4.0

Qy 1 GUGAACCTACUGUGACUC 20 Db 776 GTGAACTCACTGTGAGCTC 795

---

RESULT 13

US-10-889-101-6

Sequence 6, Application US/10889101 Publication No. US/0050107324A1

GENERAL INFORMATION:

APPLICANT: Bennett, C. Frank

APPLICANT: Dobie, Kenneth W.

APPLICANT: Jain, Ravi

TITLE OF INVENTION: MODULATION OF CEACAM1 EXPRESSION

FILE REFERENCE: ISIS/0101-100 (RTS-0657US)

CURRENT APPLICATION NUMBER: US/10/889,101

PRIOR FILING DATE: 2004-07-12

PRIOR APPLICATION NUMBER: 60/486,652

NUMBER OF SEQ ID NOS: 298

Software: FastSEQ for Windows Version 4.0

SEQ ID NO 6 LENGTH: 28920 TYPE: DNA

ORGANISM: SARS Coronavirus isolate BJ04 FEATURE: misc\_feature NAME/KEY: misc\_feature LOCATION:

OTHER INFORMATION: n = A,T,C or G US-10-889-101-6

Query Match Score 20; DB 21; Length 28920; Best Local Similarity 75.0%; Pred. No. 4.6%; Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0; Software: FastSEQ for Windows Version 4.0

Qy 1 GUGAACCTACUGUGACUC 20 Db 776 GTGAACTCACTGTGAGCTC 795

---

RESULT 14

US-10-831-901A-29819

Sequence 29819, Application US/10831901A Publication No. US/005010085A1

GENERAL INFORMATION:

APPLICANT: Crooke, Stanley T.

APPLICANT: Ecker, David J.

APPLICANT: Sampath, Rangarajan

APPLICANT: Freier, Susan M.

APPLICANT: Massire, Christian

APPLICANT: Hofstader, Steven A.

APPLICANT: Lowery, Kristin Sannes

APPLICANT: Swayne, Eric

APPLICANT: Baker, Brenda F.

APPLICANT: Bennett, C. Frank

TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe Acute Respiratory Syndrome (SARS)

FILE REFERENCE: ISIS/0083-100 (B10L0008US)

CURRENT APPLICATION NUMBER: US/10/831,901A

PRIOR FILING DATE: 2004-04-26

PRIOR APPLICATION NUMBER: 60/466,426

PRIOR FILING DATE: 2003-04-28

PRIOR APPLICATION NUMBER: 60/468,562

PRIOR FILING DATE: 2003-05-06

PRIOR APPLICATION NUMBER: 60/477,637

PRIOR FILING DATE: 2003-05-10

PRIOR APPLICATION NUMBER: 60/483,579

PRIOR FILING DATE: 2003-06-27

NUMBER OF SEQ ID NOS: 30063

Software: FastSEQ for Windows Version 4.0

SEQ ID NO 29819 LENGTH: 29013

Query Match Score 20; DB 21; Length 29013; Best Local Similarity 75.0%; Pred. No. 4.6%; Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps 0;

Qy 1 GUGAACUCACUCUGUGAGCUC 20 Db 697 GTGAACTCACTGTGAGCTC 716

---

RESULT 15

US-10-831-901A-29742

Sequence 29742, Application US/10831901A Publication No. US/005010085A1

GENERAL INFORMATION:

APPLICANT: Crooke, Stanley T.

APPLICANT: Ecker, David J.

APPLICANT: Sampath, Rangarajan

APPLICANT: Freier, Susan M.

APPLICANT: Massire, Christian

APPLICANT: Hofstader, Steven A.

APPLICANT: Lowery, Kristin Sannes

APPLICANT: Swayne, Eric

APPLICANT: Baker, Brenda F.

APPLICANT: Bennett, C. Frank

TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe Acute Respiratory Syndrome (SARS)

FILE REFERENCE: ISIS/0083-100 (B10L0008US)

CURRENT APPLICATION NUMBER: US/10/831,901A

PRIOR FILING DATE: 2004-04-26

PRIOR APPLICATION NUMBER: 60/466,426

PRIOR FILING DATE: 2003-04-28

PRIOR APPLICATION NUMBER: 60/468,562

PRIOR FILING DATE: 2003-05-06

PRIOR APPLICATION NUMBER: 60/477,637

PRIOR FILING DATE: 2003-05-10

PRIOR APPLICATION NUMBER: 60/483,579

PRIOR FILING DATE: 2003-06-27

NUMBER OF SEQ ID NOS: 30063

Software: FastSEQ for Windows Version 4.0

SEQ ID NO 29742 LENGTH: 29206

Query Match Score 20; DB 21; Length 29206; Best Local Similarity 75.0%; Pred. No. 4.6%; Software: FastSEQ for Windows Version 4.0

Qy 1 GUGAACUCACUCUGUGAGCUC 20 Db 697 GTGAACTCACTGTGAGCTC 716

---

RESULT 16

US-10-831-901A-29712

Sequence 29712, Application US/10831901A Publication No. US/005010085A1

GENERAL INFORMATION:

APPLICANT: Crooke, Stanley T.

APPLICANT: Ecker, David J.

APPLICANT: Sampath, Rangarajan

APPLICANT: Freier, Susan M.

APPLICANT: Massire, Christian

APPLICANT: Hofstader, Steven A.

APPLICANT: Lowery, Kristin Sannes

APPLICANT: Swayne, Eric

APPLICANT: Baker, Brenda F.

APPLICANT: Bennett, C. Frank

TITLE OF INVENTION: Compositions And Methods For The Treatment Of Severe Acute Respiratory Syndrome (SARS)

FILE REFERENCE: ISIS/0083-100 (B10L0008US)

Matches 15; Conservative 5; Mismatches 0; Indels 0; Gaps .0;  
QY 1 GUGACUCCUGAGCU 20  
|:|||:||:||:||:||:||:  
Db 751 GTGAACTCACTCGTAGTC 770

Search completed: June 24, 2005, 04:35:43  
Job time : 259.433 secs

GenCore version 5.1.6  
Copyright (c) 1993 - 2005 Compagen Ltd.

OM nucleic - nucleic search, using sw model

Run on: June 23, 2005, 23:49:32 ; Search time 1551.26 Seconds  
(without alignments)  
535.828 Million call updates/sec

Title: US-10-848-737-1  
Perfect score: 22  
Sequence: 1 gugaaacuacucugugagcgtt 22

Scoring table: IDENTITY NUC  
Gapop 10.0 , Gapext 1.0

Searched: 34239544 seqs, 19032134700 residues

Total number of hits satisfying chosen parameters: 68479088

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : EST:  
1: gb\_est1:  
2: gb\_est2:  
3: gb\_htc:  
4: gb\_est3:  
5: gb\_est4:  
6: gb\_est5:  
7: gb\_est6:  
8: gb\_gss1:  
9: gb\_gss2:  
\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	18.8	85.5	254	8 AQ479024	AQ479024 RPCI-11-254MS, genomic survey sequence.
c 2	18.8	85.5	1344	4 BG17388	RPCI-11-254MS, genomic survey sequence.
c 3	18.4	83.6	915	2 BF100955	RPCI-11-254MS, genomic survey sequence.
c 4	18.4	83.6	1580	3 AK031386	RPCI-11-254MS, genomic survey sequence.
c 5	17.8	80.9	451	8 A2312688	RPCI-11-254MS, genomic survey sequence.
c 6	17.8	80.9	506	5 BP091999	RPCI-11-254MS, genomic survey sequence.
c 7	17.8	80.9	514	5 BG020183	RPCI-11-254MS, genomic survey sequence.
c 8	17.8	80.9	514	8 A2236076	RPCI-11-254MS, genomic survey sequence.
c 9	17.8	80.9	544	1 AV389206	RPCI-11-254MS, genomic survey sequence.
c 10	17.8	80.9	544	6 CB213780	RPCI-11-254MS, genomic survey sequence.
c 11	17.8	80.9	546	1 AV619265	RPCI-11-254MS, genomic survey sequence.
c 12	17.8	80.9	547	8 AZ259445	RPCI-11-254MS, genomic survey sequence.
c 13	17.8	80.9	653	5 BG824823	RPCI-11-254MS, genomic survey sequence.
c 14	17.8	80.9	658	8 A2695771	RPCI-11-254MS, genomic survey sequence.
c 15	17.8	80.9	667	5 BQ220182	RPCI-11-254MS, genomic survey sequence.
c 16	17.8	80.9	689	4 BG844655	RPCI-11-254MS, genomic survey sequence.
c 17	17.8	80.9	749	9 AG17536	RPCI-11-254MS, genomic survey sequence.
c 18	17.8	80.9	770	2 BF862564	RPCI-11-254MS, genomic survey sequence.
c 19	17.4	79.1	440	8 AQ997054	RPCI-11-254MS, genomic survey sequence.
c 20	17.4	79.1	442	8 AQ996162	RPCI-11-254MS, genomic survey sequence.
c 21	17.4	79.1	575	7 CNF80938	RPCI-11-254MS, genomic survey sequence.
c 22	17.4	79.1	689	5 CE18342	RPCI-11-254MS, genomic survey sequence.
c 23	17.4	79.1	691	9 CE779822	RPCI-11-254MS, genomic survey sequence.
c 24	17.4	79.1	710	2 BF163602	RPCI-11-254MS, genomic survey sequence.

## RESULT 1

LOCUS AQ479024 RPCI-11-254MS.TV DNA linear GSS 23-APR-1999 DEFINITION Homo sapiens genomic clone RPCI-11-254MS, genomic survey sequence.  
ACCESSION AQ479024  
VERSION AQ479024.1 GI:4661143  
KEYWORDS GSS,  
ORGANISM Homo sapiens (human)  
SOURCE Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Primates; Catarhini; Homidae; Homo.  
REFERENCE 1 (bases 1 to 254)  
AUTHORS Zhao, S., Adams, M.D., Nierman, W., Malek, J., de Jong, P., and Venter, J.C.  
TITLE Use of BAC End Sequences from Library RPCI-11 for Sequence-Ready Map Building  
JOURNAL Unpublished (1997)  
COMMENT Other GSS: RPCI-11-254MS.TV  
Contact: Shaying Zhao, William Nierman, Mark Adams  
Department of Eukaryotic Genomics  
The Institute for Genomic Research  
9712 Medical Center Dr., Rockville, MD 20850  
Tel: 301 838 0200  
Fax: 301 838 0208  
Email: hbe@igr.org  
Clones are derived from the human BAC library RPCI-11. For BAC library availability, please contact Pieter de Jong (pjeter@dejong.med.buffalo.edu). Clones may be purchased from BACPAC Resources (<http://bacpac.med.buffalo.edu/ordering>) or from Research Genet cs (info@regen.com). BAC end search page: [http://www.tigr.org/cdb/humgen/bac\\_end\\_search.html](http://www.tigr.org/cdb/humgen/bac_end_search.html). Seq. primer: T7 Class: BAC ends.  
- FEATURES Source  
1. Location/Qualifiers  
/organism="Homo sapiens"  
/mol\_type="Genomic DNA"  
/db\_xref="GDB:7597444"  
/db\_xref="taxon:9606"  
/clone="RPCI-11-254MS"  
/sex="Male"  
/cell\_type="Lymphocytes"  
/clone\_id="RPCI-11-254MS"  
/note="Vector: pBACe3\_6; Site\_1: EcoRI; Site\_2: EcoRI;"  
RPCI-11 Human Male BAC Library"  
RPCI-11 Human Male BAC Library"

## ALIGNMENTS

Query Match	85 5%;	Score 18.8;	DB 8;	Length 254;		ORGANISM	Mus musculus
Best Local Similarity	68.2%;	Pred. No.	1.3e+02;	Indels	0;	Gaps	0;
Matches	15;	Conservative	5;	N mismatches			
Qy	1 GUGAACUCACUGGAGCCTT 22						
Db	1 GTGAACCTCTCCGTAGCTT 22						
RESULT 2							
LOCUS	BC917388	1344 bp	mRNA	linear	EST 05-JUN-2001		
DEFINITION	6028162903F1 NCI_CGAP_Mam6	Mus musculus	cDNA clone IMAGE:4943921 5'				
ACCESSION	BC917388						
VERSION	BC917388.1	GI:14297864					
KEYWORDS	EST.						
SOURCE	Mus musculus (house mouse)						
ORGANISM	Mus musculus						
REFERENCE	Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.						
AUTHORS	1. (bases 1 to 915)						
TITLE	NIH-MGC http://mgc.nci.nih.gov/						
JOURNAL	National Institutes of Health, Mammalian Gene Collection (MGC)						
COMMENT	Unpublished (1999)						
Contact:	Robert Strausberg, Ph.D.						
Email:	cgbps-r@mail.nih.gov						
Tissue Procurement:	Jeffrey Green M.D.						
CDNA Library Preparation:	Life Technologies, Inc.						
CDNA Library Arrayed by:	The I.M.A.G.E. Consortium (LILNL)						
DNA Sequencing by:	Incyte Genomics, Inc.						
Clone distribution:	MGC Clone distribution information can be found through the I.M.A.G.E. Consortium/LILNL at: http://image.lilnl.gov						
Plate:	LILAM10893	row: f	column: 02				
High quality sequence stop:	309.						
Location/Qualifiers	1..1344						
FEATURES	source						
REFERENCE	/organism="Mus musculus"						
AUTHORS	/mol type="mRNA"						
TITLE	/strain="FVB/N"						
JOURNAL	/db_xref="taxon:10090"						
COMMENT	/clone=IMAGE:4943921;"						
Contact:	/sex="female virgin"						
Email:	/tissue_type="infiltrating ductal carcinoma"						
Tissue:	/dev_stage="5 months"						
	/lab_host="DH10B"						
	/clone_lib="NCI_CGAP_Mam6"						
	/note="Organ: mammary; Vector: PCMV-SPORT6; Site: 1; SalI; Site 2: Not I; Cloned unidirectionally. Primer: Oligo dT. Library constructed by Life Technologies. Investigator providing samples: Jeffrey Green, M.D., NIH"						
ORIGIN							
Query Match	85.5%;	Score 18.8;	DB 4;	Length 1344;			
Best Local Similarity	68.2%;	Pred. No.	1.7e+02;	Indels	0;	Gaps	0;
Matches	15;	Conservative	5;	N mismatches			
Qy	1 GUGAACUCACUGGAGCCTT 22						
Db	996 GTGGTCATCGTGTAGCTT 975						
RESULT 3							
LOCUS	BF100955	915 bp	mRNA	linear	EST 19-OCT-2000		
DEFINITION	601754106F1 NCI_CGAP_Mam6	Mus musculus	cDNA clone IMAGE:3983736 5'				
ACCESSION	BF100955						
VERSION	BF100955.1	GI:10883481					
KEYWORDS	EST.						
SOURCE	Mus musculus (house mouse)						
RESULT 4							
LOCUS	AK031386	1580 bp	mRNA	linear	HTC 03-APR-2004		
DEFINITION	Mus musculus 13 days embryo male testis cDNA, RIKEN full-length enriched library, clone:6030419L17 product:DJ101D13.2 (NOVEL PROTEIN SIMILAR TO ACTININ, ALPHA 3) (FRAGMENT) homolog [Homo sapiens], full insert sequence.						
ACCESSION	AK031386						
KEYWORDS	HTC; CAP trapper.						
SOURCE	Mus musculus (house mouse)						
ORGANISM	Mus musculus						
REFERENCE	Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.						
AUTHORS	Carminci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shiba, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.						
TITLE	Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes						
JOURNAL	Genome Res. 10 (10), 1617-1630 (2000)						
MEDLINE	2049974						
PUBMED	11042159						
REFERENCE	99279253						
2	10349636						
REFERENCE	Carminci, P., Shibata, Y., Hayatsu, N., Sugahara, Y., Shiba, K., Itoh, M., Konno, H., Okazaki, Y., Muramatsu, M. and Hayashizaki, Y.						
AUTHORS	Normalizatio						
TITLE	n mRNA sequences.						
JOURNAL	Genome Res. 10 (10), 1617-1630 (2000)						
MEDLINE	2049974						
PUBMED	11042159						
REFERENCE	3						

AUTHORS Shibata,K., Itoh,M., Aizawa,K., Nagaoaka,S., Sasaki,N., Carninci,P., Konno,H., Akiyama,J., Nishi,K., Kitsunai,T., Tashiro,H., Itoh,M., Sumi,N., Ishii,Y., Nakamura,S., Hazama,M., Nishina,T., Harada,A., Yamamoto,R., Matsunoto,H., Sakaguchi,S., Ikegami,T., Kashiwagi,K., Fujiwake,S., Inoue,K., Togawa,Y., Izawa,M., Ohara,E., Wachikai,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsura,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and Hayashizaki,Y.

TITLE RIKEN integrated sequence analysis (RISEA) system sequencing pipeline with 384 multicapillary sequencer

JOURNAL Genome Res. 10 (11), 1757-1771 (2000)

MEDLINE 20530913

PUBMED 11076861

REFID 4

AUTHORS The RIKEN Genome Exploration Research Group Phase II Team and the FANTOM Consortium.

TITLE Functional annotation of a full-length mouse cDNA collection

JOURNAL Nature 409, 685-690 (2001)

REFERENCE 5

AUTHORS The FANTOM Consortium and the RIKEN Genome Exploration Research Group Phase I & II Team.

TITLE Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

JOURNAL Nature 420, 563-573 (2002)

REFERENCE 6 (bases 1 to 1580)

AUTHORS Adachi,J., Aizawa,K., Akimura,T., Arakawa,T., Bono,H., Carninci,P., Fukuno,M., Hanagaki,T., Hara,A., Hashizume,W., Hayashida,K., Hayatsu,N., Hiramoto,K., Hirooka,T., Hirozane,T., Horii,F., Imotani,K., Ishii,Y., Itoh,M., Kasukawa,T., Kasukawa,I., Katoch,H., Kawai,J., Kojima,Y., Kondo,S., Konno,H., Kouda,M., Koya,S., Kurihara,C., Matsuyama,T., Miyazaki,A., Murida,M., Nakamura,M., Nishi,K., Nomura,K., Numazaki,R., Ohno,M., Ohsato,N., Okazaki,Y., Saito,R., Saitoh,H., Sakai,K., Sakizume,N., Sano,H., Sasai,D., Shibata,K., Shinazawa,A., Shiraki,T., Sogabe,A., Tegami,M., Tagawa,A., Takahashi,F., Takanuki-Akahira,S., Takeda,Y., Tanaka,T., Tomarai,A., Toya,T., Yasumishi,A., Muramatsu,M. and Hayashizaki,Y.

TITLE Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail: genome-res@gsc.riken.jp, URL: http://genome.gsc.riken.jp/, Tel: 81-45-503-9216), Fax: 81-45-503-9216).

COMMENT CDNA library was prepared and sequenced in Mouse Genome Encyclopedia Project of Genome Exploration Research Group in Riken Genomic Science Center and Genome Science Laboratory in RIKEN. Division of Experimental Animal Research in Riken contributed to prepare mouse tissues.

FEATURES Please visit our web site for further details.  
JOURNAL URL: http://genome.gsc.riken.jp/

COMMENT Location/Qualifiers

1..1580

AUTHORS /organism="Mus musculus"

FEATURES /mol\_type="mRNA"

COMMENT /strain="C57BL/6J"

COMMENT /db\_xref="PANTOM DB:6030419L17"

COMMENT /clone="6030419L17"

COMMENT /sex="male"

COMMENT /issue\_type="testis"

COMMENT /clone\_id="RIKEN full-length enriched mouse cDNA library"

COMMENT /dev\_stage="13 days embryo"

COMMENT /note="unnamed protein product; DJ1014D13.2 (NOVEL PROTEIN SIMILAR TO ACTN3 (ACTININ, ALPHA 3)) (FRAGMENT) homolog (Homo sapiens) (SPR1|Q9UH44, evidence: FASTY, 88.7% ID, 65.2% length, match=72)"

CDS putative

COMMENT /codon\_start=1

COMMENT /protein\_id="BAC27378.1"

COMMENT /db\_xref="GI:26322769"

/translation="MAGGPRGALLAWCRCEGYRGVDDRLSSSERDCAAILHRSRPDLDFSLSKENVNPFENRFLAEPEGLGFPALDDNDMSMSPDCLSINTYVQQYNNHFTSGQGEGPSGRPLPVAVYFAEQ"

ORIGIN Query Match 83.6%; Score 18.4%; DB 3; Length 1580; Best Local Similarity 70.0%; Pred. No. 2.8e-02; Matches 14; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

Qy 1 GUGACACUCATUCGAGCGCUC 20  
Db 776 GTGAATCTACTGTGAGCTC 757

RESULT 5

LOCUS AZ312688 451 bp DNA linear GSS 29-SEP-2000

DEFINITION IM0028:0102R Mouse 10kb plasmid UGGC1M library Mus musculus genomic survey sequence.

ACCESSION AZ312688

VERSION AZ312688.1 GI:10356723

KEYWORDS GSS.

ORGANISM Mus musculus (house mouse)

REFERENCE 1 (bases 1 to 451)

AUTHORS Dunn,D., Ayagi,A., Barber,M., Beacontree,M., Chordata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus. Islam,H., Longacre,S., Mahmoud,M., Meenen,E., Pedersen,T., Reilly,M., Rose,M., Stokes,R., Tingey,A., von Niederhausern,A. and Wright,D. Weiss,R.

TITLE Mouse whole genome scaffolding with paired end reads from 10kb plasmid inserts

JOURNAL Unpublished (2000)

COMMENT Contact: Robert B. Weiss  
University of Utah Genome Center  
University of Utah  
Rm. 308, Biomedical Polymers Research Bldg., 20 S. 2030 E., SLC, UT 84112, USA  
Tel: 801 585 5606  
Fax: 801 585 7177  
Email: ddunn@genetics.utah.edu

FEATURES Insert Length: 10000 Std Error: 0.00  
Plate: 0028 Row: J Column: 02  
Seq primer: CACAGGAAACAGGTATGACC  
Class: plasmid ends  
High quality sequence stop: 451.  
Location/Qualifiers  
1..451  
/organism="Mus musculus"  
/mol\_type="genomic DNA"  
/strain="C57BL/6J"  
/db\_xref="taxon:10090"  
/clone="UGGC1M0028J02"  
/sex="male"  
/lab\_host="E. Coli strain XL10-Gold, T1-resistant, F-"  
/clone="Mouse 10kb Plasmid UGGC1M library"  
/note="Vector: PWD42nv; Purified genomic DNA from M. musculus C57BL/6J (male) was obtained from the Jackson Laboratory Mouse DNA Resource (http://www.jax.org/resources/documents/dnares/). The DNA was hydrodynamically sheared by repeated passage through a 0.005 inch orifice at constant velocity. The sheared DNA was blunt end-repaired with T4 DNA Polymerase and T4 polynucleotide kinase. Adaptor oligonucleotides were ligated to the blunt ends in high molar excess. The adaptor DNA was purified and size-selected for a 9.5 to 10.5 kb range using preparative agarose gel electrophoresis. Vector DNA was prepared from a derivative of PWD2 (gi|4732114 gb|AF129072.1), a copy-number inducible derivative of plasmid R1. The vector was ligated with adaptors complementary to the insert adaptors and purified. The sheared, adaptored mouse DNA was annealed to

adapted vector DNA, and transformed into chemically-competent *E. coli* X10-Gold (Stratagene) cells and selected for ampicillin resistance."

**ORIGIN**

Query Match Score 17.8; DB 8; Length 451; Best Local Similarity 71.4%; Pred. No. 4.7e+02; Matches 15; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Qy 1 GUGAACUCACUCGUGAGCUC 21  
|:||:||:||:||:||:  
Db 177 GAGAACTACTGGTGAAGCTT 197

**RESULT 6**  
BP091999/c LOCUS BP091999 506 bp mRNA linear EST 30-JUN-2004 DEFINITION Chlamydomonas reinhardtii C9 various Conditions Chlamydomonas reinhardtii cDNA clone MX248b10\_r 5', mRNA sequence.

VERSION BP091999  
KEYWORDS EST.  
ORGANISM Chlamydomonas reinhardtii  
Chlamydomonadaceae; Chlamydomonas.  
Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales; Chlamydomonadaceae; Chlamydomonas.  
Asamizu,E., Nakamura,Y., Miura,K., Fukuzawa,H., Fujiwara,S.,  
Hirono,M., Iwamoto,K., Matsuda,Y., Minagawa,J., Shimogawara,K.,  
Tokhashi,Y. and Tabata,S.  
Establishment of Publicly Available cDNA Material and Information Resource of Chlamydomonas reinhardtii (Chlorophyta), to Facilitate Gene Function Analysis  
Phycologia (2004). In press

COMMENT Contact: Erika Asamizu  
The First Laboratory for Plant Gene Research Kazusa DNA Research Institute Yana 1532-3, Kisarazu, Chiba 292-0812, Japan  
Email: asamizu@kazusa.or.jp; URL: http://www.kazusa.or.jp/en/plant/.

**FEATURES source**

Query Match Score 17.8; DB 5; Length 514; Best Local Similarity 66.7%; Pred. No. 4.8e+02; Matches 14; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 1 .506  
.organism="Chlamydomonas reinhardtii"  
/mol\_type="mRNA"  
/strain="C9"  
/db\_xref="NC\_007401.1"  
/clone\_lib="MX248b10\_r"  
/note="vector: pBluescript II SK-; Site 1: EcoRI; Site 2: XbaI; The cDNA library was made from a mixture of cells grown under various conditions"

**ORIGIN**

Query Match Score 17.8; DB 5; Length 506; Best Local Similarity 66.7%; Pred. No. 4.8e+02; Matches 14; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 2 UGAACUCACUCGUGAGCUC 22  
:||:||:||:||:||:  
Db 503 TAATCTCATTCGTGAGCTT 483

**RESULT 7**  
BQ820183/c LOCUS BQ820183 514 bp mRNA linear EST 01-AUG-2002 DEFINITION reinhhardtii CC-1690, Deflagellation (normalized), Lambda Zap II Chlamydomonas reinhardtii cDNA, mRNA sequence.

VERSION BQ820183  
KEYWORDS EST.  
ORGANISM Chlamydomonas reinhardtii  
Chlamydomonadaceae; Chlamydomonas.  
Eukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales;

**FEATURES source**

Query Match Score 17.8; DB 5; Length 514; Best Local Similarity 66.7%; Pred. No. 4.8e+02; Matches 14; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 1 .506  
.organism="Chlamydomonas reinhardtii"  
/mol\_type="mRNA"  
/strain="C9"  
/db\_xref="NC\_007401.1"  
/clone\_lib="CC-1690 wild type mt+ 21gr"  
/note="Vector: pBluescript II SK-; Site 1: EcoRI; Site 2: XbaI; Deflagellation library, constructed by John Davies and Jeffrey Mcdermott, combines cDNAs from CC-1690 cells which had been re-synthesizing cDNA for 15, 30 and 60 min after being deflagellated by pH shock. PolyA mRNA was purified from each sample, pooled and cDNA synthesized. The cDNA was directionally cloned into Lambda Zap II (Stratagene) in the EcoRI (5') and XbaI (3') sites. pBluescript II SK- plasmids were excised from the lambda ZAP clones by superinfection with ExASIS (Stratagene) phage. The library was normalized using method 4 described in Bonaldo et al., (1996) Genome Research 6: 791-806."

**ORIGIN**

Query Match Score 17.8; DB 5; Length 514; Best Local Similarity 66.7%; Pred. No. 4.8e+02; Matches 14; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 2 UGAACUCACUCGUGAGCUC 22  
:||:||:||:||:  
Db 483 TAATCTCATTCGTGAGCTT 463

**RESULT 8**  
A2236076/c LOCUS A2236076 514 bp DNA linear GSS 14-JUN-2000 DEFINITION RPCI-23-84D17-TJ RPCI-23 Mus musculus genomic clone RPCI-23-84D17, Genomic Survey Sequence.

VERSION A2236076  
KEYWORDS GSS.  
ORGANISM Mus musculus (house mouse)

**FEATURES source**

Bukaryota; Metazoa; Chordata; Craniata: Vertebrata; Buteleostomi; Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.  
REFERENCE 1 (bases 1 to 514)  
AUTHORS Zhao,S., Nierman,W., Feldblum,T., Malek,J., Shatsman,S., Akinremi,B., Levins,M., McGann,S., Tsegaye,G., Geer,K., Krol,M., de Jong,P. and Fraser,C.M.  
TITLE Mouse BAC End Sequences from Library RPCI-23  
JOURNAL Unpublished (1999)  
COMMENT Other GSSs: RPCI-23-84D17-TV  
Contact: Shaving Zhao  
Department of Bukaryotic Genomics  
The Institute for Genomic Research  
9712 Med Center Dr., Rockville, MD 20850, USA  
Tel: 301 838 0200  
Fax: 301 838 0208  
Email: szhao@tigr.org  
Clones are derived from the mouse BAC library RPCI-23. For BAC

library availability, please contact Pieter de Jong ([pjter@ddjong.med.buffalo.edu](mailto:pjter@ddjong.med.buffalo.edu)). Clones may be purchased from BACPAC Resources (<http://bacpac.med.buffalo.edu/orderingframe.htm>) or from Rosea ch Genetics ([info@regen.com](mailto:info@regen.com)). BAC end page: [http://www.tigr.org/tigrdb/bac\\_ends/mouse/bac\\_end\\_intro.html](http://www.tigr.org/tigrdb/bac_ends/mouse/bac_end_intro.html)

Plate: 84; row: D; column: 17

Seq. Primer: SP6

Class: BAC ends.

## Location/Qualifiers

1.	.514	/organism="Mus musculus"
/mol_type="genomic DNA"		
/strain="C57BL/6J"		
/db_xref="Taxon:10090"		
/clone="RPCI-23-84D17"		
/sex="Female"		
/lab_host="DH10B"		
/clone_lib="RPCI-23"		
/note="Organ: Kidney/Brain; Vector: pBACE3.6; Site 1: EcorI; Site 2: EcoRI; Brain; Vector: pBACE3.6; Site 1: brain genomic DNA was isolated and partially digested with a combination of EcoRI and EcoRI Methylase. Size Selected DNA was cloned into the pBACE3.6 vector at the EcoRI sites. The ligation products were transformed into DH10B electrocompetent cells (BRL Life Technologies)."		
ORIGIN		
Query Match Score 80.9%; Best Local Similarity 71.4%; Matches 15; Conservative 4; Mismatches 2; Indels 0; Gaps 0;		
Db 226 GAGAACTACTGGTGGCTCT 206		

Query Match Score 80.9%; Best Local Similarity 71.4%; Matches 15; Conservative 4; Mismatches 2; Indels 0; Gaps 0;

Db 226 GAGAACTACTGGTGGCTCT 206

RESULT 9 AV389206/c LOCUS AV389206 Chlamydomonas reinhardtii C9 EST 29-SEP-2000 DEFINITION CDNA clone CM040a08\_r, mRNA sequence. ACCESSION AV389206 VERSION AV389206..1 GI:6543422 KEYWORDS EST. SOURCE Chlamydomonas reinhardtii Chlamydomonas reinhardtii: Chlorophyta; Chlorophyceae; Volvocales; Chlamydomonadaceae; Chlamydomonas. REFERENCE Asamizu, E., Nakamura, Y., Sato, S., Fukuzawa, H. and Tabata, S. TITLE A large scale structural analysis of cDNAs in a unicellular green alga, Chlamydomonas reinhardtii. I. Generation of 3433 non-redundant expressed sequence tags

JOURNAL DNA Res. 6 (6), 369-373 (1999)

MEDLINE 20152988 PUBMED 10691129 COMMENT The First Laboratory for Plant Gene Research Kazusa DNA Research Institute, Yana 1532-3, Kisarazu, Chiba 292-0812, Japan Email: [ynakamu@kazusa.or.jp](mailto:ynakamu@kazusa.or.jp); URL:<http://www.kazusa.or.jp/en/plant/>.

FEATURES source

1. .544 /organism="Chlamydomonas reinhardtii"

/mol\_type="mRNA"

/strain="C9"

/db\_xref="Taxon:3055"

/clone="CM040a08\_r"

/dev\_stage="photoautotrophic growth"

/clone\_lib="Chlamydomonas reinhardtii C9"

/note="Vector: pBluescriptII SK-; Site\_1: ECORI; Site\_2: XhoI"

ORIGIN

FEATURES source	1.	.514	/organism="Mus musculus"	Query Match Score 80.9%; Best Local Similarity 71.4%; Matches 15; Conservative 4; Mismatches 2; Indels 0; Gaps 0;	DB 1; Pred. No. 4.8e-02; Mismatches 2; Indels 0; Gaps 0;	Length 544;
		/mol_type="genomic DNA"	LOCUS CB213780 Oryza minuta HybrizAP-2.1 XR library	DEFINITION mRNA sequence.	mRNA	EST 05-FEB-2003
		/strain="C57BL/6J"	CB213780	VERSION CB213780..1	GI:28259871	
		/db_xref="Taxon:10090"	EST.			
		/clone="RPCI-23-84D17"	KEYWORDS			
		/lab_host="DH10B"	SOURCE			
		/clone_lib="RPCI-23"	ORGANISM			
		/note="Organ: Kidney/Brain; Vector: pBACE3.6; Site 1: EcorI; Site 2: EcoRI; Brain; Vector: pBACE3.6; Site 1: brain genomic DNA was isolated and partially digested with a combination of EcoRI and EcoRI Methylase. Size Selected DNA was cloned into the pBACE3.6 vector at the EcoRI sites. The ligation products were transformed into DH10B electrocompetent cells (BRL Life Technologies)."	COMMENT			
		ORIGIN	REFERENCE			
		Query Match Score 80.9%; Best Local Similarity 71.4%; Matches 15; Conservative 4; Mismatches 2; Indels 0; Gaps 0;	AUTHORS Shin, J.S.			
		Db 226 GAGAACTACTGGTGGCTCT 206	TITLE			
		RESULT 10 CB213780/c	JOURNAL			
		LOCUS CB213780 Oryza minuta HybrizAP-2.1 XR library	COMMENT			
		DEFINITION mRNA sequence.	CONTACT			
		mRNA	Plant Molecular Genetics			
		/mol_type="mRNA"	Graduate School of Biotechnology, University of Korea			
		/db_xref="taxon:66629"	136-701 Anam-dong 5/1 Seoul, Korea			
		/dev_stage="#-weeks after germination"	Tel: 08 92 2 3290 3430			
		/clone_lib="Oryza minuta HybrizAP-2.1 XR library"	Fax: 08 92 2 927 9028			
		/note="Organ: immature leaf"	Email: <a href="mailto:jsshin@kucnx.korea.ac.kr">jsshin@kucnx.korea.ac.kr</a>			
		ORIGIN	FEATURES			
		Query Match Score 80.9%; Best Local Similarity 66.7%; Matches 14; Conservative 5; Mismatches 2; Indels 0; Gaps 0;	source			
		Db 199 TGAGCTCACCTGTGAGCTCT 179	COMMENT			
		RESULT 11 AV619265/c	COMMENT			
		LOCUS AV619265 Chlamydomonas reinhardtii r 5'	DEFINITION reinhardtii cDNA clone LC005h05_r 5', mRNA sequence.			
		DEFINITION AV619265	ACCESSION AV619265..1			
		DEFINITION AV619265	VERSION GI:10768440			
		DEFINITION AV619265	KEYWORDS EST.			
		DEFINITION AV619265	SOURCE Chlamydomonas reinhardtii			
		DEFINITION AV619265	ORGANISM Chlamydomonas reinhardtii			
		DEFINITION AV619265	REFERENCE Chlamydomonadaceae; Chlamydomonas.			
		DEFINITION AV619265	AUTHORS Asamizu, E., Miura, K., Kuroda, S., Inoue, Y., Fukuzawa, H., Ohya, M., Nakamura, Y. and Tabata, S.			
		DEFINITION AV619265	TITLE Generation of expressed sequence tags from low-CO2 and high-CO2 adapted cells of Chlamydomonas reinhardtii			
		DEFINITION AV619265	JOURNAL DNA Res. 7 (5), 305-307 (2000)			
		DEFINITION AV619265	MEIDLINE 20539644			
		DEFINITION AV619265	PUBMED 11089912			

COMMENT Contact: Erika Asamizu  
 The First Laboratory for Plant Gene Research  
 Kazusa DNA Research Institute  
 Yana 1522-3, Kisarazu, Chiba 292-0812, Japan  
 Email: asamizu@kazusa.or.jp; URL: http://www.kazusa.or.jp/en/plant/.

FEATURES source

1. '546  
 /organism="Chlamydomonas reinhardtii"  
 /mol\_type="mRNA"  
 /strain="C9"  
 /db\_xref="taxon:3055"  
 /clone="JCO05105\_r"  
 /clone.lib="Chlamydomonas reinhardtii SK- Site 1: EcoRI; Site 2:  
 XbaI.; The cDNA library was constructed from cells cultured  
 in a carbon stress acclimatized condition in which carbon  
 dioxide concentration in the bubbling gas was changed from  
 5% to 0.04%"

ORIGIN

Query Match 80.9%; Score 17.8; DB 1; Length 546;  
 Best Local Similarity 66.7%; Pred. No. 4.8e+02;  
 Matches 14; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 2 UGAACUCACUGAGAGCTT 22  
 Db 476 TAACTCTCGAGCTCT 456

RESULT 12  
 A2259445/C LOCUS AZ259445 RPCT-23-114N6.TV RPCI-23 547 bp DNA linear GSS 26-JUL-2000  
 DEFINITION Mus musculus genomic clone RPCI-23-114N6,  
 genomic survey sequence.  
 ACCESSION A2259445  
 VERSION A2259445.1 GI:9465935  
 KEYWORDS GSS.  
 SOURCE Mus musculus (house mouse)  
 ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Mammalia; Eutheria; Rodentia; Sciurognathii; Murinae; Mus.  
 REFERENCE 1 (bases 1 to 547)  
 AUTHORS Zhao,S., Niezman,W., Feldblum,T., Malek,J., Shatsman,S.,  
 Akireet,B., Levins,M., McGaugh,S., Tsegaye,G., Geer,K., Krolik,M., de  
 Jong,P., and Fraser,C.M.  
 JOURNAL Mouse BAC End Sequences from Library RPCI-23  
 COMMENT Unpublished (1999)  
 Contact: Shaying Zhao  
 Department of Eukaryotic Genomics  
 The Institute for Genomic Research  
 9712 Medical Center Dr., Rockville, MD 20850, USA  
 Tel: 301 838 0200  
 Fax: 301 838 0208  
 Email: szhao@tigr.org

Clones are derived from the mouse BAC library RPCI-23. For BAC library availability, please contact Pierre de Jong (pieterdejong.med.buffalo.edu). Clones may be purchased from BACPAC Resources (<http://bacpac.med.buffalo.edu/orderingframe.html>) or from Resezch Genetics ([info@resgen.com](mailto:info@resgen.com)) BAC end page: [http://www.tigr.org/tdb/bac\\_ends/mouse/bac\\_end\\_intro.html](http://www.tigr.org/tdb/bac_ends/mouse/bac_end_intro.html)  
 Plate: 114 row: N column: 6  
 Seq primer: T7  
 Class: BAC ends  
 FEATURES source

1. '547  
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 /mol\_type="Genomic DNA"  
 /strain="C57BL/6J"  
 /db\_xref="taxon:10090"  
 /clone="RPCI-23-114N6"  
 /sex="Female"  
 /lab\_host="DH10B"

ORIGIN

Query Match 80.9%; Score 17.8; DB 5; Length 653;  
 Best Local Similarity 66.7%; Pred. No. 4.8e+02;  
 Matches 14; Conservative 5; Mismatches 2; Indels 0; Gaps 0;

Qy 2 UGAACUCACUGAGAGCTT 22  
 : ||| :||| :||| :|||

Db	482 TAAACTCTTCGTGAGCTCTT 462	SOURCE ORGANISM	Chlamydomonas reinhardtii Chlamydomonas reinhardtii Bukaryota; Viridiplantae; Chlorophyta; Chlorophyceae; Volvocales;
RESULT 14 A2695771/C	AZ695771 AZC1-23-240D2-TV RPCI-23 Mus musculus genomic clone RPCI-23-240D2, genomic survey sequence.	REFERENCE AUTHORS	Grossman,A., Chang,C.-W., Davies,J., Hauser,C., Harris,E., Hauser,C., Leibvre,P., Mcpermott,J.P., Shrager,J., Sifliew,C. and Stern,D. Analyses of the Chlamydomonas reinhardtii Genome: A Model Unicellular System for Analyzing Gene Function and Regulation in Vascular Plants. Project: 1030 Unpublished (2002)
DEFINITION	AZ695771 GSS.	JOURNAL COMMENT	Unpublished (2002) Contact: Charles Hauser DCMB Box 91000 Duke University Durham, NC 27708-1000 Tel: 919 613 8159 Fax: 919 613 8177 Email: chauer@duke.edu.
ACCESSION	Mus musculus (house mouse)	FEATURES source	Location/Qualifiers 1..667 /organism="Chlamydomonas reinhardtii" /mol_type="mRNA" /strain="CC-1690 Wild type mt+ 21gr" /db_xref="taxon:3055" (clone lib="C. reinhardtii CC-1690, Deflagellation (normalized), Lambda Zap II" (note="vector: pBluescript II SK-; Site:1: EcoRI; Site:2: 'XbaI: Deflagellation library, constructed by John Davies and Jeffrey McDermott, combines cDNAs from CC-1690 cells which had been re-synthesizing flagella for 15, 30 and 60 min after being deflagellated by pH shock. PolyA mRNA was purified from each sample, pooled and cDNA synthesized. The cDNA was directionally cloned into lambda Zap II (Stratagene) in the EcoRI (5') and XbaI (3') sites. pBluescript II SK- plasmids were excised from the lambda Zap clones by superinfection with Exasist (Stratagene) phage. The library was normalized using method 4 described in Bonaldo et al., (1996) Genome Research 6: 791-806." ORIGIN Query Match Score 17.8; DB 5; Length 667; Best Local Similarity 66.9%; Pred. No. 5e+02; Matches 14; Conservative 5; Mismatches . 2; Indels 0; Gaps 0; Qy 2 UGAAACUCACUCUGUGAGCUCU 22 Db 483 TAAACTCATCGTGAGCTCTT 463 Search completed: June 24, 2005, 04:05:34 Job time : 1564.43 secs
KEYWORDS	Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathini; Muridae; Murinae; Mus.	COMMENT	
ORGANISM	Zhao,S., Nierman,W., Feldblum,T., Malek,J., Shatsman,S., Akincet,B., Levins,M., McGann,S., Tsengye,G., Geer,K., Krol,M., de Jong,P. and Fraser,C.M.	COMMENT	
REFERENCE	1 (bases 1 to 658)	COMMENT	
AUTHORS	Unpublished (1999)	COMMENT	
ACCESSION	Other GSS: RPCI-23-240D2-TJ	COMMENT	
KEYWORDS	Contact: Shaying Zhao Department of Eukaryotic Genomics The Institute for Genomic Research 9712 Medical Center Dr., Rockville, MD 20850, USA Tel: 301 838 0200 Email: szhao@tigr.org	COMMENT	
ORGANISM	Clones are derived from the mouse BAC library RPCI-23. For BAC library availability, please contact Pieter de Jong (pdejong@mail.chor.org). Clones may be purchased from BACPAC Resources ( <a href="http://www.chorl.org/bacpac/orderingframe.html">http://www.chorl.org/bacpac/orderingframe.html</a> ). BAC end page: <a href="http://www.tigr.org/tgb/bac_ends/mouse/bac_end_intro.html">http://www.tigr.org/tgb/bac_ends/mouse/bac_end_intro.html</a> Plate: 240 row: D column: 2 Seq primer: T7 Class: BAC ends.	COMMENT	
FEATURES source	Location/Qualifiers 1..658 /organism="Mus musculus" /mol_type="genomic DNA" /strain="C57BL/6J" /db_xref="taxon:10090" /clone="RPCI-23-240D2" /sex="Female" /lab host="DH10B" /clone lib="RPCI-23" /note="Organ: Kidney/Brain; Vector: pBACE3.6; Site-1: EcoRI; Site 2: EcoRI; Female C57BL/6J mouse kidney and/or brain genomic DNA was isolated and partially digested with a combination of EcoRI and EcoRI Methylase. Selected DNA was cloned into the pBACE3.6 vector at the EcoRI sites. The ligation products were transformed into DH10B electrocompetent cells (BRL Life Technologies)."	COMMENT	
DEFINITION		COMMENT	
ACCESSION		COMMENT	
VERSION		COMMENT	
KEYWORDS		COMMENT	
RESULT 15 BQB20182/C	Query Match Score 17.8; DB 8; Length 658; Best Local Similarity 71.4%; Pred. No. 4.9e+02; Matches 15; Conservative 4; Mismatches 2; Indels 0; Gaps 0;	COMMENT	
LOCUS	Qy 1 GUGAACUCACUCUGUGAGCUCU 21 Db 228 GAGAACTCACTCGTGTGAGCTCT 208	COMMENT	
DEFINITION		COMMENT	
ACCESSION		COMMENT	
VERSION		COMMENT	
KEYWORDS		COMMENT	

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